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WHAT IS VMI?

VMI is a program where the vendor manages the level of inventory at the customer’s inventory locations. The vendor is responsible for analyzing and optimizing the inventory flow for each of the customers they are in a VMI relationship with.

In a VMI relationship, inventory can be held by the vendor, customer, or under consignment.

VMI is concerned with the management of inventory, where consignment is concerned with the ownership of inventory.

Both can happen independently or at the same time.
TYPICAL VMI PROCESS FLOW

1. **Vendor Notification**
2. **Customer Notification**
3. **Schedule Orders**
   - Review + Edit
4. **Acknowledge Orders**
5. **Customer**
6. **Ship Orders**

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**Distributor**

1. **Generate Orders**
   - Review + Edit
2. **Receive Orders**
3. **Run Replenishment Engine**
4. **Consume/Sell Orders**
5. **Customer**
OVERVIEW

The two most important aspects of VMI are a high level of trust and effective communication between the parties involved. Efficient information flow is what allows VMI relationships to be successful. Customers need to create a channel through which vendors can access their organization's data and use it to optimize their sales and inventory levels. They need to be able to trust that their vendors will utilize this information in a professional and productive manner.

Inventory data can be tracked and updated in person by the vendor, or the customer can give them access electronically. This data is consistently updated by the customer through an automated process, or manually if they don't have the technology. Having access to this information gives the vendor the ability to track inventory and replenish accordingly to avoid under or over stocking. Vendors and customers should work together before implementing a VMI system to set minimum, maximum, and reorder point levels. This helps get both parties on the same page in terms of when new stock should be ordered and how much should be kept on hand.

"The most important aspect of VMI is that the parties involved have a high level of trust and are able to communicate effectively."
There needs to be a mutual benefit between the two parties looking to enter into a VMI relationship. The customer benefit comes mainly from alleviated responsibility. Along with the shift in responsibility, comes a shift in the costs for order planning and processing. This shift creates a decrease in costs for the customer. The vendor’s main benefit comes from increased control over the inventory. They are able to accurately forecast demand since they have access to their customer’s data. This allows inventory to be managed with a focus on efficiency, lean manufacturing, and seamless delivery.

When considering a VMI relationship, organizations have to realize that it may not be the right system for every partnership. For a VMI system to be the right choice, there has to be a solid working relationship to build on, and both the vendor and customer have to find benefit in the outcome.

“VMI may not be the right system for every partnership.

There needs to be a mutual benefit between the two parties.”
WHY USE VMI?

There are a variety of benefits that come from VMI. There will be an increase in profits seen by both parties if implemented successfully. These increased profits are realized through a combination of cutting costs and increasing sales and related revenues.

VMI helps to generate profits by increasing sales revenues while cutting costs.

By moving the inventory decisions closer to the source of inventory, the supply chain can react much more quickly to shifts in product demand. This, in turn, helps to avoid over or under stocking products, and increases the number of inventory turns. Because the vendor has the ability to monitor inventory levels and trends, they are able to quickly respond to needs and immediately send out stock. By shifting this information and control up the supply chain, the bullwhip effect is reduced and inventory orders will reflect demand more accurately.

The Bullwhip Effect is when there are large inventory variances seen as you move up the supply chain from the end customer to the initial provider. Miscommunication and each organization acting in self interest are the most common causes of these variances.

Improve Order Accuracy
Increase Inventory Turns
Generate Greater Sales
IS VMI RIGHT FOR YOU?

VMI is a widely adopted technique used across industries to improve inventory management and supply chain operations. There are many proven benefits with VMI; however, it may not be right for everyone.

Do you and your partner have an established working relationship?

YES

Will there be a mutual benefit between the partners?

YES

Are there organizational processes in place to allow information sharing?

YES

Are both partners expectations of the system aligned?

YES

Do you have time to properly implement the VMI system?

YES

It is essential that the partners looking to implement a VMI system have an established working relationship. The two parties need to be able to collaborate and trust each other in order to create a successful system.

If one party does not benefit from implementing the system, they will have no motivation to actively participate in the partnership. A VMI system is a highly collaborative process that requires cooperation from both parties.

Information needs to be shared across one communal channel for a VMI system to work effectively. Each organization should have competent processes in place to gather and report inventory data independently, before setting up a VMI system.

It is important to clearly outline expectations and performance metrics prior to implementing the system. Some things to consider are inventory turn goals, customer service fill rates, dead stock, and surplus stock.

Having the time to implement a VMI system is essential to ensure a smooth transition. Do not rush the process! Start small and work your way up to a more complex system.

Before implementing a VMI system be sure to get advice from industry peers and other experts. Do your own research as well to ensure you are fully ready for the transition.

VMI may not be for everyone, but can greatly help if it is right for you.
CUSTOMER BENEFITS

- Higher Inventory Turnover
- Seamless Deliveries
- Lower Maintenance Costs
- Improved Customer Service
- Increased Sales and Profitability

OFFERED VENDOR

- Greater Control
- Improved Inventory Planning
- Reduced Operating Costs
- Stronger Customer Relationships
- Increased Sales and Profitability
Higher Inventory Turnover

Through data sharing, vendors have visibility into their customer’s inventory and sale levels. Having access to this information allows vendors to better, and more frequently, monitor inventory. Product demand is accurately reflected in inventory planning and ordering, since information is monitored more frequently and closer to the source of stock. This accuracy allows for smaller orders to be put through more frequently, decreasing both the cost of carrying inventory and the number of stock outs.

Seamless Delivery

It is easy for vendors to know when their customers need stock, since they have access to the customers’ inventory levels. Having access to this knowledge in real-time allows orders to be processed much more quickly. There is virtually no delay between recognizing the need for inventory and an order being placed. A VMI system gives you the ability to meet customer demand dynamically and create a responsive and agile supply chain.
Lower Maintenance Costs

The data flow becomes more consistent when a VMI relationship is formed. Both the vendor and the customer use and update the same system, allowing for better communication. The customer saves time and money related to inventory planning and ordering, as these responsibilities are shifted to the vendor. When entering into a VMI relationship, many customers have found that their buyers can reallocate 50% of their time into more value-adding functions.

Improved Customer Service

With VMI, vendors are more aware of consumers’ needs. This allows them to place orders with a quicker response rate and to more accurately reflect demand. This ensures their customers have the right product at the right time, keeping the consumer happy. Vendors have more in-depth knowledge of product offering which allows them to put together a better product mix. Both of these activities increase the level of service offered to the consumer.

Increased Sales and Profitability

Many of the benefits listed prior, contribute to increased sales and profitability. Having fewer stock outs, a quicker response time, less administration costs, and a better product mix, all help increase sales. VMI allows for better collaboration between the vendor and customer, giving them the ability to work in a cohesive manner. Having the efforts of two companies working to drive sales and effectively manage inventory, has a great impact on overall profitability.
Greater Control

One of the largest benefits that a vendor gains from entering into a VMI relationship is increased control. They gain access to their customers’ inventory sales and demand data, and can be preauthorized to place orders to meet any needs that may arise. Vendors can better manage inventory planning, stabilize purchase order timing, and work promotions into their inventory plan from the back end. Vendors can create a more consistent order schedule to meet the demand needs, thus minimizing the number of rushed orders. They are also able to work any special events into their production schedule so that they do not fall behind on orders.

Improved Inventory Planning

With timely access to inventory data, vendors can better plan not only their customers’ orders, but their own orders and production as well. Having access to their customers data makes vendors aware of the fulfillment urgency for specific items. They are able to better prioritize production and orders to ensure demand is met on time. Since demand knowledge is gained earlier and more consistently with VMI than in a traditional vendor-supplier relationship, vendors are able to respond to unexpected or special activity in a more prompt manner. During new product introductions vendors have immediate access to sales data on these products. Decisions related to these product introductions can be made more rapidly, allowing for execution to happen in a shorter time frame.
Reduced Operating Costs

Although it can be costly to take on the responsibilities of managing inventory, the savings from improving operational efficiency can easily offset this cost.

The following are areas where vendors often see operational improvements:

- Fewer errors from miscommunication
- Fewer rushed orders due to stock outs
- More consistency in the ordering process
- Lower transportation costs from consolidation
- Less ‘deadstock’ being sent back
- Improved order accuracy from timely information

Many companies have seen reductions in the total number of orders of between four and six percent, which greatly adds to reduced operating costs.

Stronger Customer Relationships

Through a VMI relationship, trust and reliance between the vendor and the customer are increased over time. Having a long standing relationship with customers will help reduce the cost of sales and help vendors protect and grow their market share. Vendors build a strong reputation with their current customers, making it more likely for these customers to continue the relationship, and recommend the vendor to other customers in the market. The vendor and customer relationship will evolve into a strategic partnership through VMI. The customer and vendor will be able to gain valuable insights from each other on how to improve their operational efficiency.

Increased Sales and Profitability

This benefit goes hand in hand with customers increasing sales and profitability. As the customers sales go up, they will need to increase the amount of inventory they order, therefore increasing the vendors’ sales. There are many different elements that play a role in increasing the sales on the customers end. Having fewer stock outs, quicker response time, less administration costs, and better product mix, all contribute to this increase. VMI allows for better collaboration between the vendor and customer, and gives them the ability to work in a more cohesive manner. Two organizations working together to drive sales and effectively manage inventory often results in an increase in profitability.
POTENTIAL PITFALLS AND HOW TO AVOID THEM

Data Translation
With such a large amount of data constantly being shared between parties, it can be easy for some of it to get lost in translation. This is why it is important to ensure there is one common language used within the system. A large part of this is in the way that products are referenced and what information is stored for each item. These details need to be known and familiar to both parties. It may take more time in the setup phase to ensure consistency, but it will pay off in the long run.

Rapid Changes
Highly volatile items can be harder to manage in a VMI system. If the vendor is not familiar with the trends of these items, and this information is not reported or communicated in a timely manner, it can cause a delay in the system. Having open communication about these items from the start and working together to monitor the demand, help mitigate this issue.

Overstocking
Some customers may be concerned that vendors will overstock inventory to increase their own sales. However, if this is a legitimate concern, then the initial trust needed for a VMI relationship is not there. VMI is about creating a relationship where both partners are motivated towards mutual benefits, and working towards the same goals. If this relationship has not been established you may want to reconsider moving forward with a VMI project.

Understocking
On the other hand, there may be a concern that the vendor will understock in an attempt to increase inventory turns. Setting unrealistic parameters for inventory goals is often the main cause of this issue. You have to ensure that both partners’ inventory and fulfillment goals are aligned before entering into a VMI relationship.
8 STEPS TO SETTING UP VMI

1. UNDERSTANDING YOUR PARTNER
2. SELECTING A VMI SERVICE PROVIDER
3. ORGANIZE AND COUNT INVENTORY
4. SET ORDER QUANTITIES
5. GATHER INVENTORY DATA
6. STORE INVENTORY DATA
7. CHOOSE REPLENISHMENT SYSTEM
8. SET UP ORDER CREATION
UNDERSTANDING YOUR PARTNER

It is crucial that both partners understand and accept each other’s expectations. In the initial phases of implementation, the vendor and customer should clearly outline these expectations, along with specific performance metrics. They should understand each others’ business models and company visions. It is important to gain this level of understanding in the early stages so that both companies are working towards one common goal from the start.

VMI SERVICE PROVIDER

A VMI system can be set up through internal communication or a VMI service provider. Though both have been successfully implemented, many companies have said that going through a provider makes the process easier and more user friendly. Service providers tend to have inventory knowledge to help align your VMI system with your process flow, along with the capabilities to make data translation seamless between the two partners involved.

ORGANIZE AND COUNT INVENTORY

When implementing a VMI system it is a good idea to “refresh” the inventory that will be going into the system. Complete a physical count on all items and then decide how this count is going to be maintained moving forward. If the inventory site is not organized, you should implement a system to ensure that it is. Using bins and labels, and providing a high amount of detail on each item, enables quick and easy inventory retrieval.

SET ORDER QUANTITIES

The vendor and distributor should set predetermined minimum, maximum, and re-order points ahead of time. Use of past data and distributor sale knowledge, will help determine optimal levels for each of these performance metrics. Then, once the system goes live, the predetermined points and up-to-date inventory levels will be used to calculate replenishment orders.
GATHER INVENTORY DATA
Data can be entered electronically through barcode scanners and other mobile devices, or manually. The method of data entry depends upon the environment, the required or desired speed of entry, and retrieval and budget for mobile technology. Another option is to obtain POS data, usage data in the form of EDI (Electronic Data Interchange) transactions, or API’s (Application Programming Interface) between the purchasing and ordering systems.

STORE INVENTORY DATA
The next step is deciding how your data will be uploaded and stored in the system. The information can be sent to the inventory management system either in real time if there is an internet connection, or saved temporarily and downloaded to the system when a connection becomes available. If an API is used, data is usually sent real-time, or at a predetermined time on a daily basis.

CHOOSE REPLENISHMENT SYSTEM
Once all the data is in place, a decision needs to be made on how replenishment will be calculated. The inventory data will be monitored and measured against the predetermined performance metrics, allowing decisions to be made and new orders created. This can be done automatically through an inventory management software, manually by hired professionals, or through a mix of both methods.

SET UP ORDER CREATION
Finally, the orders created through the replenishment system need to be uploaded to your in-house business system. This can be done automatically through API’s so they can then be picked, packed, and shipped. Distributors can then acknowledge, receive the goods, or have the system do it automatically. Any ASN (Advance Shipping Notification) or other information can be sent back to the inventory management system for the vendor, or third party agent, to review. The benefit of having a workflow engine is that you can accommodate different processes, or workflows, for different clients and items.

Setting up a VMI system is an on-going process. At anytime throughout, or after completion of implementation, there may be a need to re-evaluate certain stages. With each organization operating in a dynamic environment, their individual needs are ever-changing and evolving. The performance needs and expectations of each organization can change, resulting in changes in what is demanded of the system.
Recognize “VMI is not for Everyone”

For VMI to be successful:
- Basic operational capabilities need to be in place.
- Both partners need the ability to produce good data
- The customer must produce a sufficient level of transactional volume

Understand it is a Collaborative Process

Both partners need to take an active role in:
- Creating a consistent flow of inventory data.
- Building trust in the relationship.
- Having prompt and open communication.

KEYS TO SUCCESS
Common VMI Operations Platform

Both partners need to agree on a single platform that:
- Is designed with an understanding of inventory management.
- Has the ability to facilitate effective communication.
- Can deliver consistent and reliable information daily.

Leverage VMI Experience

Before implementing a VMI system, gather information from:
- Knowledgeable professionals in similar fields.
- Organizations that have successfully implemented, and use VMI systems.
- Historical inventory and sales data from the customer.

Clarify Expectations

Before implementing VMI, partners need to discuss:
- Potential long and short term benefits.
- Performance metrics and inventory goals.
- Expectations of each other, and the tasks they will be responsible for.
HOW CLEAR SPIDER CAN HELP
INTEGRATE. CUSTOMIZE. AUTOMATE.

Clear Spider is a cloud-based, vendor managed inventory system that provides clients with visibility to thousands of forward stocking locations. This is made possible through a highly customizable platform, limitless integration options, and a smooth implementation process. Our system has surpassed our current clients’ expectations for their VMI needs.

See what we can do for you!
CLEAR SPIDER MAKES DATA TRANSLATION SEAMLESS

Clear Spider makes VMI possible by allowing vendors and customers access to the same system. Both parties can update and view the system on their own time, making data translation seamless. Clear Spider also allows these permissions to be customized for each party so they only have access to the features necessary for their operations. This allows companies to maintain organizational security, while still allowing for easy and open communication.
CLEAR SPIDER INCREASES ORDER PROCESS ACCURACY

From the vendor's perspective, Clear Spider allows them to track inventory levels using minimums, maximums, and reorder points. These indicators will notify vendors when the customers’ inventory falls below the preset levels and an order needs to be placed. Vendors are able to track inventory through a variety of reports and live data, allowing them to improve delivery times and more accurately forecast customer demand. In addition, vendors can create purchase orders, print barcodes, run inventory reports, and more. Clear Spider helps to simplify and ensure accuracy in the order process.
VENDOR MANAGED INVENTORY FEATURES

- Customizable Platform
- Rapid Data Loading
- Role-Based Users
- Reporting and Analytics
- Automatic Order Replenishment
- Consignment and Fulfillment Capabilities
- Intelligent Workflow Engine
- Barcode and RFID Scanning
Customizable Platform

Clear Spider is a customizable platform built on ASP.net, Microsoft’s web application framework. A customizable system like Clear Spider gives you the ability to have your inventory system match your inventory processes.

Rapid Data Loading

With Clear Spider, you can import large amounts of data into the system using excel spreadsheets. The template to do this will be provided to you during the setup phase of implementation, which allows you to upload your initial SKUs. The template can also be used for mass updates, rather than manually editing individual items. This makes it simple for your organization to keep up to date information, even when large scale updates are required.

Role-Based Users

Users in the Clear Spider system can be granted different levels of access based on operational needs. For example, using role-based permissions can limit your employees, or vendors, to only viewing inventories at their locations. This will keep inventories private and only accessible to the appropriate users. Any degree of visibility is possible. It simply depends upon your business needs.

Reporting and Analytics

Clear Spider offers a variety of customizable SQL-based reports that can be exported to Excel and XML formats. Some examples include billing history, order history, planned inventory, tracking number, and item reports. These reports help vendors better monitor system performance and track past data and trends.
Automatic Order Replenishment

The systems re-plan engine produces automatic purchase orders based on reorder points, minimum and maximum quantities, and consumption. System generated purchase orders will be created with the appropriate quantities to bring customers back up to their desired stock levels. Automatic replenishment helps to reduce stock shortages and ensure that orders are always placed on time.

Consignment and Fulfillment Capabilities

Fulfillment encompasses all of the processes that take a product from the vendor to their customers. Clear Spider’s fulfillment capabilities include order generation, acknowledgment, pick, pack, ship, bill, receive, and unit of measure conversion. We can customize the system further for capabilities that are unique to your organization, such as consignment storage.

Intelligent Workflow Engine

The Clear Spider workflow engine deals with the process used in order management. You can define the specific stages of an order that your business requires, and the sequence in which they need to be completed. This allows Clear Spider to accommodate any level of supply chain complexity, and help you ensure each step is completed along the way.

Barcode and RFID Scanning

With Clear Spider, you have the option to integrate barcode or RFID scanners to simplify the data entry process. If you don’t already have scanners in place, we can help you select the right technology for your operations. You can either use barcodes that are already on your items, or print custom labels using the Clear Spider system. These capabilities make organizing and maintaining inventory a hassle free process.
Grainger is a Fortune 500 company and the leading supplier of maintenance, repair, and operating products. They manage the inventory of 2 million customers in 157 countries with Clear Spider’s VMI Solutions.

**Est. 1927**
Headquarters: Lake Forest, Illinois

**BEFORE CLEAR SPIDER**
Grainger was experiencing a high level of growth. They needed a solution that could handle the size and complexity of their operations, while working to boost efficiency.

**WHAT GRAINER NEEDED**
- Reduce the workload on sales force to enhance customer service levels.
- Cut operating costs while maintaining sales growth to increase revenue.
- Solution needed to be flexible and scalable to grow with the organization.

**THE CLEAR SPIDER SOLUTION**
- Streamlined Communication
- Role Based Flexibility
- Automatic Replenishment
- Scanning Capabilities

**IMPLEMENTATION**
- Quick to Deploy
- Easy to Use
- Low Cost to Maintain

- Mobile Solutions make re-orders easy and accommodate real-time data and notifications.

**RESULTS**
- Closer Customer Relationships
- Decreased Inventory Costs and Associated Procurement Costs
- Increased Sales and Revenue

[Thumbs up, dollar symbol, rising graph]
Today, over 100,000 companies use Clear Spider on a daily basis.

Clear Spider is a web-based inventory management solution for companies to manage either their own inventory or the inventory of their customers and suppliers. There is no hardware or software installation, so deployment is quick.

Clear Spider is easy to learn, use, and maintain.

Interested in learning more? Contact us to discuss your vendor managed inventory needs.

Today, over 100,000 companies use Clear Spider on a daily basis.

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