What Is the Value of Your Vendor Managed Inventory Relationships?

Does an Old Process Need a Facelift?

6/24/2014

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Supply Chain Insights LLC
Research

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Disclosure

Your trust is important to us. As such, we are open and transparent about our financial relationships and our research processes.

Research Methodology and Overview

This report is based on 38 respondents from a quantitative study and 13 qualitative interviews with companies managing VMI processes. The quantitative objectives are outlined in the Study Overview in Figure 1.

Figure 1. Vendor Managed Inventory Quantitative Study Goals and Objectives

<table>
<thead>
<tr>
<th>WHY</th>
<th>WHAT</th>
<th>WHO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives:</strong></td>
<td><strong>Survey Topics Include:</strong></td>
<td><strong>Respondents:</strong></td>
</tr>
<tr>
<td>• To understand where companies are on the use of vendor managed inventory processes and the value proposition they present</td>
<td>• Number of and respondent involvement in VMI relationships.</td>
<td>• 38 respondents from the Consumer Packaged Goods or Food &amp; Beverage industries.</td>
</tr>
<tr>
<td><strong>Methodology:</strong></td>
<td>• Evaluation of VMI relationship most familiar with.</td>
<td>• Respondents required to be at least somewhat familiar with vendor managed inventory processes at their company.</td>
</tr>
<tr>
<td>• Surveys conducted online by Supply Chain Insights</td>
<td>• Tools used in core VMI relationship.</td>
<td></td>
</tr>
<tr>
<td>• Survey dates:</td>
<td>• Supply chain agility definition and performance.</td>
<td></td>
</tr>
<tr>
<td>• December 9, 2013 – June 12, 2014</td>
<td>• Team alignment importance vs. performance.</td>
<td></td>
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</tbody>
</table>
For the purposes of this study, a Vendor Managed Inventory (VMI) process was defined as the process when a vendor, or supplier, of a company takes responsibility for the management of inventory in the channel. This may or may not include ownership to write, or define, the customer order.

As with all Supply Chain Insights studies, we keep all of the respondent data confidential and only report the results in aggregate.
Executive Overview

Vendor Managed Inventory (VMI) processes were developed in the 1980s. The stewards of today’s VMI processes inherited the relationships. There has been very little change in process definition; but, the strategic nature of accounts participating in the VMI relationships has changed. When the processes were defined, the relationship concentration was with bigger and more strategic mass-merchant accounts. Today, the average company has 12 relationships across a variety of small accounts. The largest concentrations of relationships are now in the drug and dollar channels.

Today, most companies take VMI relationships for granted. Business leaders are not aggressively looking at VMI programs as a source of valuable demand data. However, based on the data from this report, we think that the questions should be, “Are we maximizing the value? Should we rethink the processes to drive even greater value?”

All companies interviewed for this report were getting value from their VMI relationships. The value proposition was either in shorter order lead-time, a reduction in logistics costs, or improved order reliability. Multiple companies commented that VMI enabled greater flexibility in managing the product portfolio, and ensuring data accuracy of the orders.

In a time when growth has slowed, and complexity reigns, we ask “Shouldn’t VMI be a hot topic?” Today, it is not. Instead, it is taken for granted. It is the goal of this report to rekindle the thinking on an old process that is largely being taken for granted.
Current State of VMI

The Vendor Managed Inventory (VMI) programs were designed and implemented three decades ago, and remain largely unchanged. The VMI planners for the average company report through the customer service organization and manage the programs day-to-day with a focus of improving customer orders. Most of these employees are senior and pride themselves on driving value in the relationship. By and large, companies are not looking at VMI as a source of demand data or market insights. Complacency reigns.

While VMI relationships started with large mass retailers like Walmart and Target, the current relationships are with smaller retailers. The focus of large multinational companies is with retailers in the United States. However, the channel emphasis has shifted. For most manufacturing companies today, the dominant VMI relationships are in the Dollar, Drug, and Grocery channels. In the qualitative interviews, the most frequently mentioned retail relationships were with BJs, Carrefour, Costco, CVS, Delhaize, Dollar General, Family Dollar, Food Lion, HEB, K-Mart, Kroger, Metro, Rite-Aid, Stop & Shop, Wake Fern, Wegmans and Winn Dixie. The average percentage of the US market represented in VMI relationships varies from 40-60%.

In the interviews, when asked “What is the value of VMI?”, the response was improved retail data quality and forecast accuracy. The manufacturing planners had a strong belief that the added attention to the retail account helped to compensate for data quality issues and the inaccuracies of retail forecasts. Their belief is that the investment in VMI creates better orders. This is supported by the facts in this quantitative study.

In the qualitative interviews, HEB was cited as having the cleanest data, while Supervalu was seen as the toughest relationship to manage. In general, the Dollar Store channels were the easiest to manage through VMI. The categories are smaller, and more straightforward with less change. Conspicuously absent from the list are the more strategic relationships of Publix, Target, Tesco, and Walmart.

In all the qualitative interviews, it is clear that the program is not growing. The number of relationships is at a standstill. The average number of VMI relationships for a company is 12. The maximum number of VMI relationships, for the companies interviewed, was 33. A planner usually handles two retail accounts.
The processes are in stasis. There is not a lot of change, energy, or redefinition occurring in the processes for the companies interviewed.

The systems used are adequate. It is usually not one, but multiple technologies are used to manage a VMI relationship. It is usually the combination of an EDI platform technology like Datalliance or IBM CRP along with an Advanced Planning Solution (APS) like JDA, Logility, Ortec, or SAP to guide the process.

As shown in Figure 2, Electronic Data Interchange (EDI) is used by 68% of respondents, with supply chain management planning software used by 63%. Private networks are used by 47% of the respondents, and multi-party trading exchanges, or B2B supply chain business networks, are used by 13%.

**Figure 2. Tools Used in the Respondents' VMI Relationships**

<table>
<thead>
<tr>
<th>Tools Used in Most Familiar VMI Relationship</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic data interchange (EDI / XML)</td>
<td>68%</td>
</tr>
<tr>
<td>Supply chain management software</td>
<td>63%</td>
</tr>
<tr>
<td>Spreadsheets</td>
<td>53%</td>
</tr>
<tr>
<td>Specialized VMI networks</td>
<td>47%</td>
</tr>
<tr>
<td>Multi-party trading exchanges</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>18%</td>
</tr>
</tbody>
</table>

*Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)*

Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)

Q13. In the VMI relationship that you are most familiar with, which of the following tools do you use? Please select all that apply.
What Is the Value Proposition of Vendor Managed Inventory Relationships?

The average manufacturer has funded six people to manage 12 relationships. Over the last decade, they have invested time and energy into the implementation of VMI technologies. There are few new implementations today in consumer packaged goods, and food/beverage manufacturing companies. Today, most of the investments are sunk costs. In our interviews the question remains, “What is the value? What is the benefit from VMI processes?” There are three primary benefits:

1. **Lower Transportation Costs.** In qualitative interviews, all interviewed companies were able to reduce the cost of transportation by at least 3% by maximizing vehicle fill rates. The most frequently mentioned value proposition of companies interviewed was the impact on transportation planning. The truck vehicle loading could be optimized and the trucks were tendered earlier and available more reliably to the carriers when there was the presence of a VMI relationship. The value of transportation planning is increasing as there are more and more constraints on the availability of drivers and power units within the United States market.

Figure 3. Benefits of Vendor Managed Inventory Relationships

*VMI Relationship* Performance on Supply Chain Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Better</th>
<th>Same</th>
<th>Worse</th>
<th>Don’t know</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing customer service level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>percent</td>
<td>87%</td>
<td>8%</td>
<td>11%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Business partner relationships</td>
<td>87%</td>
<td>8%</td>
<td>11%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Early alerting of potential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>out-of-stock</td>
<td>82%</td>
<td>11%</td>
<td>5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Order management reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Execution of new product launch</td>
<td>79%</td>
<td>11%</td>
<td>5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Managing demand variation</td>
<td>79%</td>
<td>11%</td>
<td>5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Achieving customer inventory turns</td>
<td>79%</td>
<td>11%</td>
<td>5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>req’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply chain planning</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Achieving perfect orders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing truck fill rate percent</td>
<td>74%</td>
<td>11%</td>
<td>5%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>SC visibility of orders &amp; shipments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-shelf availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing time sensitive shelf life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>products</td>
<td>58%</td>
<td>16%</td>
<td>24%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Execution of trade promotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deduction &amp; contract payment term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mgmt</td>
<td>29%</td>
<td>58%</td>
<td>6%</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)

*VMI relationship most familiar with Q9. How would you rate the VMI relationship you are most familiar with on each of the following supply chain components, compared to your non-VMI relationships? SCALE: 1=VMI is much worse, 7=VMI is much better
2. **Better Order Quality.** In the quantitative survey, we find that companies shipping through VMI processes have better order integrity and reliability. There is also benefit from demand sensing or early alerting for a potential out-of-stock condition. The top three benefits for companies responding to the survey are outlined in Figure 3. These are significant.

3. **Reduction in Lead Times.** VMI orders ship a day earlier to the retailer, improving the time of response. (As shown in Figure 4, the average time without VMI is 4.5 days while the time with a VMI process is 3.7 days.) As more and more companies are being asked to ship more frequently, with smaller orders and less lead time, the VMI processes and the reduction in lead time could be used to meet the escalating retail requirements by manufacturers.

![Figure 4. Lead-Time to Ship an Order](image)

**Number of Business Days to Ship to Retailer**

(Order Receipt to Shipment)

- **Average:**
  - VMI Relationship*: 3.7 days
  - Average Non-VMI Relationship: 4.5 days

<table>
<thead>
<tr>
<th>1-4 days</th>
<th>5-7 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>66%</td>
<td>47%</td>
</tr>
<tr>
<td>50%</td>
<td>29%</td>
</tr>
</tbody>
</table>

*VMI relationship most familiar with Q10: For each of the following, how many business days does it typically take your company to ship to the retailer (from order receipt to shipment)? Your best estimate is fine. NUMERIC ENTRY

**Source:** Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)

**Base:** Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)

**NOTE:** Data not shown includes those answering “don’t know” (7% for VMI Relationship, 3% for Average Non-VMI Relationship)
In addition, in the qualitative interviews, we captured numerous benefit statements:

“Rush orders are easier in Vendor Managed Inventory (VMI) programs.” — Customer Service Director, Consumer Packaged Goods Company

“We have more flexibility. It is easier to manage “ins and outs” for product run-outs in a VMI relationship.” — Customer Service Manager for an Over-the-Counter Drug Manufacturer

“The number of items we manage has grown 10X in ten years. It is much easier to manage a wider portfolio through VMI.” — VMI Planner, Manufacturer of Food Supplements

“The more promotions that we do, the greater the value of VMI. It is easier to see the flows and manage the ups and downs of the promotion.” — Customer Service Manager, Household Products

“The biggest value for us is the minimization of labor costs in the warehouse. Through the use of VMI programs, we can reduce warehouse picking and improve order shipment cycles.” — Customer Service Manager, Household Products Manufacturer

**VMI Could Be Much, Much More…**

In consumer products and retail relationships, we have three decades of talk on the value of collaborative relationships, but we find that while there is value in current VMI relationships, the processes could be much, much more. Is it time for a VMI renaissance?

We think so. It is important today on two fronts:

**Implementing VMI today Drives Value Relationship By Relationship.** Each retailer relationship implemented has improved order accuracy and shorter lead times with a lower cost of transportation. Today, with rising costs of transportation and supply chain complexity, this value is not insignificant.

**Longer-Term, VMI Can Used as a Powerful Demand Signal.** The second value proposition is to use VMI as a demand signal. In the early days of VMI, the emphasis was to achieve enough critical mass in channel relationships to have a real-time demand signal of daily data to build outside-in processes. In the implementation of sales-specific programs between a retailer and an account team, the VMI processes are managed by the order management teams, but this original promise of VMI has been forgotten.

Today, companies have achieved a significant concentration of channel data of 40-60%, but they are not using it in the redefinition of processes. In our qualitative interviews, only one company was
actively pursuing more VMI relationships to improve demand visibility. This is consistent with our quantitative study. In Figure 5, we see that few companies have synchronized the VMI flows with their supply chain systems. For most companies, the VMI processes lie as a deserted island within the enterprise. The flows are not connected.

Figure 5. Descriptions of the Most Familiar VMI Relationship

<table>
<thead>
<tr>
<th>Description</th>
<th>Agreement Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have the right people</td>
<td>79%</td>
</tr>
<tr>
<td>Our leadership team supports the VMI relationship</td>
<td>74%</td>
</tr>
<tr>
<td>We use VMI to deepen trading relationships</td>
<td>66%</td>
</tr>
<tr>
<td>We have the right technology</td>
<td>58%</td>
</tr>
<tr>
<td>Our VMI programs are well integrated into our strategy</td>
<td>55%</td>
</tr>
<tr>
<td>Our VMI signals are well integrated into our supply chain response</td>
<td>37%</td>
</tr>
<tr>
<td>Our VMI technology is integrated into supporting supply chain technologies</td>
<td>30%</td>
</tr>
</tbody>
</table>

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)
Q11. When it comes to the VMI relationship you’re most familiar with, how much do you agree or disagree with each of following? SCALE: 1=Disagree strongly, 7=Agree strongly

In the consumer industries, we approached the tipping point of having enough data from retailers to achieve a concentrated look at the channel to drive outside-in processes, but lost steam. The processes of implementing these programs took time, energy and money. In the processes of implementation, we forgot the larger goal of using the data to drive demand-driven processes.

Today, despite the high percentage of channel penetration, the VMI signal is an input into the order processing stream, but not into the demand management processes. The data is brought into the organization, and the orders processed, but the data is not used as a source of demand sensing information. We are confused. Despite new technologies, and investments in downstream data projects, little progress has been made on the integration of VMI into downstream data, forecasting, and demand sensing projects. Our question is “Why?”
The answer is complex, but here are some factors to consider:

- **Process Stasis.** Most of the relationships and processes were inherited. They were not actively designed. By and large, at the height of the VMI hype cycle, the companies jumped into the fray without designing the relationships. The processes were largely designed by customer service and sales. They were sales-driven and built at the request of the retailer. They were not designed outside-in from the retailer back to the manufacturing companies. The question is, what could be the value of VMI if the signal was synchronized and harmonized as part of a demand sensing signal?

- **New Possibilities. Little Energy.** Today’s technologies offer new capabilities for sense-and-learn analytics and demand sensing. However, there is little appetite by the companies interviewed to look at the systems more holistically.

- **Requires a Redesign of Forecasting Systems.** Most of the traditional forecasting systems require a redesign to integrate and synchronize the VMI signals into demand management. Most companies do not have the appetite for another demand management system.

**Summary**

In the last five years, the number of products for the average Consumer Packaged Goods (CPG) company increased by 25-33%. The product lines are more complex. Retail order accuracy has not improved. Yet, VMI processes have not been redefined to drive more value.

The stakes are higher. The cost to develop a new product increased 4X and the failure rate of a new product is high. Retailers are selling more and more volume of house brands. Amazon is redefining the channel. VMI helps to improve order reliability in changing product portfolios.

Suppliers to retail are under constant pressure to reduce lead-times and improve costs. Growth has slowed and more and more companies are being asked to adopt retail-specific programs. As a result, it would seem that the value of VMI would be obvious. It is not. Perhaps it is time to rethink the equation? Redesign the processes? We think so.
Appendix

Demographic Data

In this section, we share the demographic information of survey respondents as well as additional charts referenced in the report to substantiate the findings.

The participants in this research answered the surveys of their own free will. There was no exchange of currency to drive an improved response rate. The primary incentive made to stimulate the response was an offer to share and discuss the survey results in the form of Open Content research at the end of the study.

The names, both of individual respondents and companies participating, are held in confidence. The demographics are shared to help the readers of this report gain a better perspective on the results. The demographics and additional charts are found below in Figures A–E.

Figure A. Familiarity with Vendor Managed Inventory Processes

Respondent VMI Familiarity and Involvement

<table>
<thead>
<tr>
<th>Familiarity with VMI Processes</th>
<th>VMI Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very familiar 92%</td>
<td>Involved in VMI: 82%</td>
</tr>
<tr>
<td>Somewhat familiar 8%</td>
<td>Manage VMI program directly: 66%</td>
</tr>
<tr>
<td></td>
<td>VMI analyst and drive results for VMI program: 8%</td>
</tr>
<tr>
<td></td>
<td>Use VMI data in trade promotion work: 5%</td>
</tr>
<tr>
<td></td>
<td>Part of sales team (manages VMI relationships): 5%</td>
</tr>
<tr>
<td></td>
<td>Use VMI data in category management: 3%</td>
</tr>
<tr>
<td></td>
<td>IT analyst working on VMI: 3%</td>
</tr>
</tbody>
</table>

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)
NOTE: respondents were required to be at least “somewhat” familiar with VMI to qualify for the survey
Q1. How familiar are you with your company’s vendor managed inventory (VMI) processes? SCALE: 1=Not at all familiar, 4=Very familiar
Q6. What is your personal involvement in VMI programs at your company?
Figure B. Industry of the Respondents

Industry

- Food & Beverage: 26%
- Consumer Packaged Goods: 74%

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)
NOTE: Only those in the Consumer Packaged Goods or Food & Beverage industries qualified for this survey.

Q2. Which industry grouping best defines your company? Please select the one that fits best, even if the terminology isn’t quite right.

Figure C. Role within the Company of the Respondents

Respondent Role

- Cross-Functional Business Leadership: 24%
- Customer Service: 97%
- SC Planning: 21%
- IT: 8%
- Warehouse Logistics & Distribution: 9%
- Other: 8%

Respondent Title

- DIRECTOR OR ABOVE: 37%
- Vice President: 8%
- Director/Sr. Director: 29%
- Senior Manager: 29%
- Manager: 18%
- Sole contributor: 8%
- Internal consultant: 5%
- Other: 3%

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)

Q22. Which of the following best describes your current role, even if the terminology isn’t quite right?
Q23. Please indicate which of the following best describes your current title or position. Please select the one that fits best, even if the terminology isn’t quite right.
Figure D. Number of VMI Relationships Managed

Number of VMI Relationships

- 11-30: 26%
- 1-10: 66%
- Over 30: 5%
- Don’t know: 9%
- 12 relationships on average

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)

Q4. How many vendor managed inventory (VMI) relationships, if any, exist at your company? Please count in terms of the number of companies.

Figure E. Change in Number of VMI Relationships

Change in Number of VMI Relationships in 2013 vs. 2012

- Increased: 21%
- Stayed the same: 50%
- Decreased: 26%
- Don’t know: 3%

Source: Supply Chain Insights LLC, Vendor Managed Inventory Study (Dec 2013 – June 2014)
Base: Those in CPG or Food & Beverage industries, familiar with vendor managed inventory processes at company (n=38)

Q5. In 2013, did the number of your company’s VMI relationships increase, stay the same, or decrease compared to the year before?
Other Reports in This Series

This report is a follow-up report to three prior reports that examined the flows of the extended value chain. The purpose of this report is to examine the value of VMI.

Supply Chain Visibility in Business Networks, Published in March, 2014


Building B2B Supply Chain Networks, Who are the Players? Published in April, 2014

About Supply Chain Insights LLC

Founded in February, 2012 by Lora Cecere, Supply Chain Insights LLC is focused on delivering independent, actionable and objective advice for supply chain leaders. If you need to know which practices and technologies make the biggest difference to corporate performance, turn to us. We are a company dedicated to this research. We help you understand supply chain trends, evolving technologies and which metrics matter.

About Lora Cecere

Lora Cecere (twitter ID @lcecere) is the Founder of Supply Chain Insights LLC and the author of popular enterprise software blog Supply Chain Shaman currently read by 5,000 supply chain professionals. She also writes as a Linkedin Influencer and is a a contributor for Forbes. Her book, Bricks Matter, (co-authored with Charlie Chase) published on December 26th, 2012. She is currently working on a second book, Metrics That Matter, to publish in November, 2014.

With over ten years as a research analyst with AMR Research, Altimeter Group, and Gartner Group and now as a Founder of Supply Chain Insights, Lora understands supply chain. She has worked with over 600 companies on their supply chain strategy and speaks at over 50 conferences a year on the evolution of supply chain processes and technologies. Her research is designed for the early adopter seeking first mover advantage.