

# Five Strategies for Improving **Inventory Management** Across Complex Supply Chain Networks

## *How Companies Think about Growing Network Pressures - and Ways they can Effectively Respond*

### Introduction

Effective inventory management is at the core of supply chain management excellence.

Management of multiple types of inventories, including not only finished goods but raw materials, work-in-process, partner inventories and more, truly sits at the intersection of demand and supply.

Yet our understanding of inventory management practices in many respects still has a long way to go. In fact, it is really only in the last decade or so that the direct link between inventory management effectiveness and corporate cash flow generation has been well understood, or maybe more accurately has finally received board level interest.

Consultant Gerry Marsh, who works with some of the world's largest companies, has shown that firms that are able to use the supply chain to generate more cash flow than competitors will usually have higher stock price multiples even if earnings per share and growth rates are similar between the companies.

Yet, leading up to the recession, inventory levels in most industries had stayed very flat for years, showing little progress. Why? Many argue that flat inventory performance in the face of longer, more outsourced supply chains, SKU proliferation and other factors that have been putting upward pressure on inventory levels actually meant companies were making solid progress on the basics.

That may very well be true, but in the end leaves companies with little to show in terms of bottom line improvement.

Most companies did cut inventories sharply in the deep recession year of 2009, but primarily through "slash and burn" type approaches, sometimes with the goal of corporate survival, using techniques that may not be sustainable as the economy continues to recover.

*"...it is only in the last decade... that the direct link between inventory management effectiveness and corporate cash flow generation has been well understood, (and) has finally received board level interest."*

## Five Strategies for Improving Inventory Management...

Now, coming out of the recession, companies are again facing a number of issues that are adding to their supply chain network complexity, which serve as headwinds to inventory reduction. Today, many if not most supply chains are feeling at least several of these sorts of network pressures:

- Increased global scope and reach that must be managed
- Significant network changes resulting from mergers, acquisitions, and divestitures
- Increasing virtualization and resulting loss of visibility and control
- Challenges resulting from multi-channel go-to-market strategies
- Shrinking product lifecycles not only in well-recognized areas such as high tech and electronics but in virtually every manufacturing sector.

As a result, companies realize that effectively managing inventories a node or level at a time is no longer good enough. The problems and challenges must be tackled more holistically, considering strategies and tools that can tame the growing network inventory beast in a way that brings those inventory levels down while maintaining or even improving customer service levels.

In this report, we summarize key findings from a recent *CSCO Insights* survey on network inventory management, and offer five ideas companies can consider to expand and improve their current inventory management practices.

## Survey Results

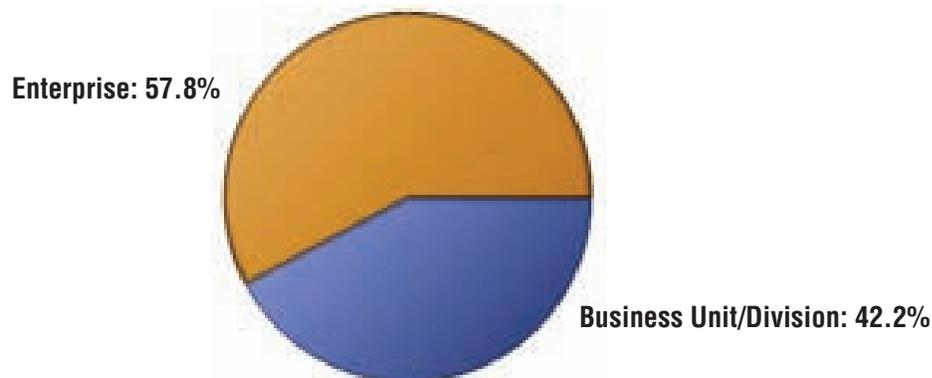
In late Spring, *Chief Supply Chain Officer (CSCO) Insights* conducted a survey on supply chain network inventory management.

In the end, approximately 225 usable, qualified responses were received.

First, we will review some of the basic demographics of the respondent population, which we think represents a very balanced mix of companies and industries.

We began by asking respondents whether their answers represented their entire corporation or a specific business unit or division within the company. We always find this an interesting question, because it in

### Scope of Respondent's Answers



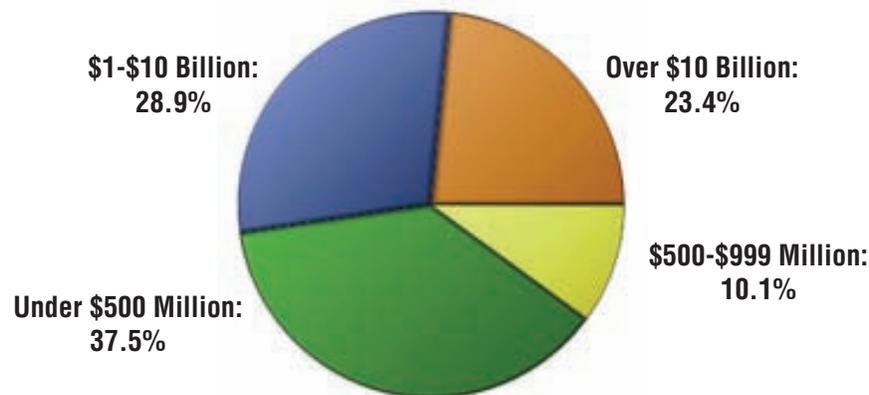
### Five Strategies for Improving Inventory Management...

part suggests how companies think about supply chain management in their firms (centralized versus decentralized).

As can be seen on the previous page, about 58% of respondents were answering for the whole company, versus 42% for a specific division/SBU.

In terms of overall size, there was a good mix across all sales levels, with 23% coming from companies greater than \$10 billion in annual revenue, down to 37.5% with revenues under \$500 million per year. However, related to the previous question, about half of the under \$500 million respondents are actually part of larger companies. In general, therefore, we would say the respondents are somewhat skewed towards larger companies, though today companies in the \$1-5 billion range are generally viewed as “mid-sized” - quite a change from not many years ago.

### Size of Company/Division



We also asked companies to rate themselves in terms of their supply chain network complexity (see chart on page 4).

Respondents provided an answer simply based on their own perceptions. We did not try to define the various levels, as it seemed an almost impossible task.

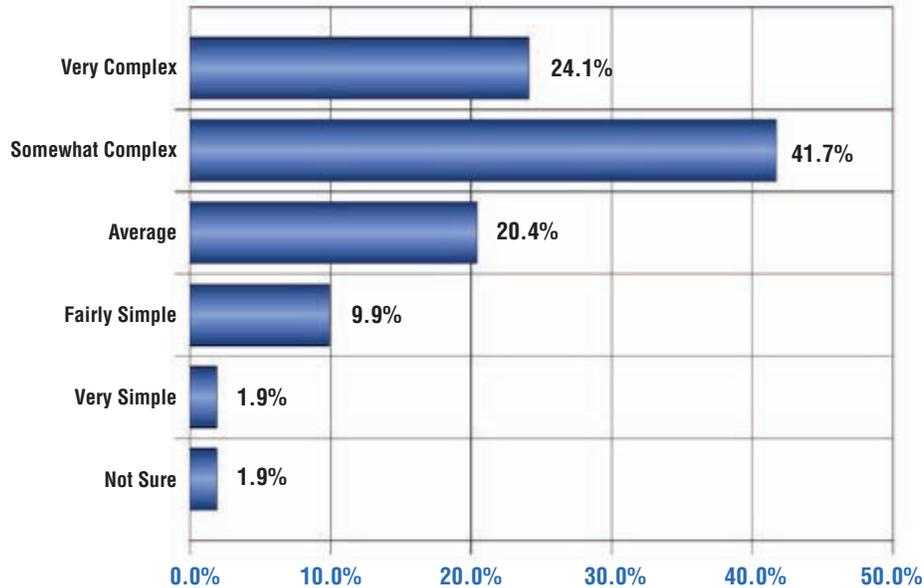
As can be seen, 24% view their networks as “very complex,” and another 42% see them as “somewhat complex,” meaning that nearly 66% believe that they have complex networks - a strong preponderance of respondents.

This is probably not surprising for two reasons: regardless of size, we think most companies do believe their supply chain network operations are complex today, if nothing else compared to what they might have had just a few years ago; second, the promotion for the survey probably tended to connect with companies that saw themselves as having supply chain network/inventory management challenges versus those that did not.

In fact, only 12% of respondents saw their networks as “simple” or “fairly simple.”

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### Supply Chain Network Complexity

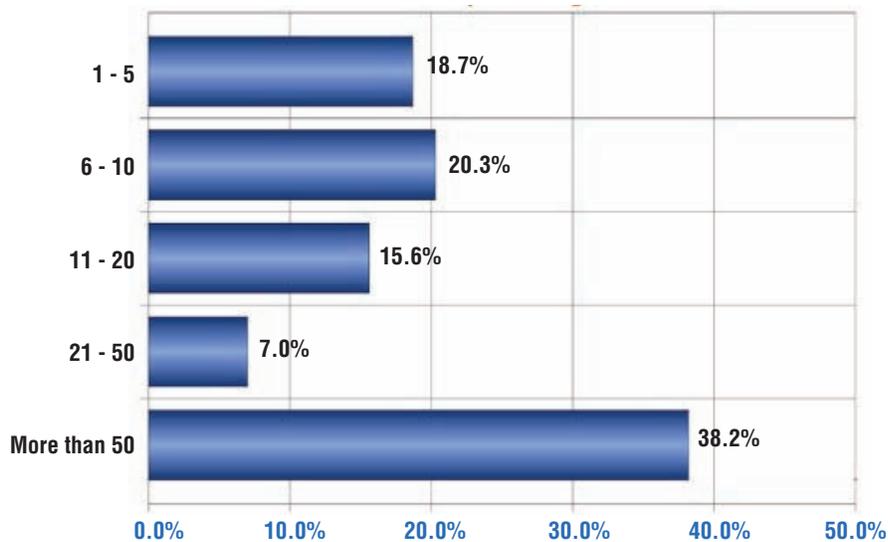


One dimension of supply chain network complexity is the number of inventory stocking points or “nodes” the network contains.

Here, we had a very broad mix, with a combined 39% of respondents having 10 or fewer nodes, while an almost equal number (38%) reported having more than 50 stocking locations.

Of course, these numbers do not represent trading partner inventories (suppliers, contract manufacturers, co-packers, channels), areas where many companies are also looking to better manage inventory levels when doing network inventory planning even if they do not “own” the inventory there.

### Supply Chain Network Complexity



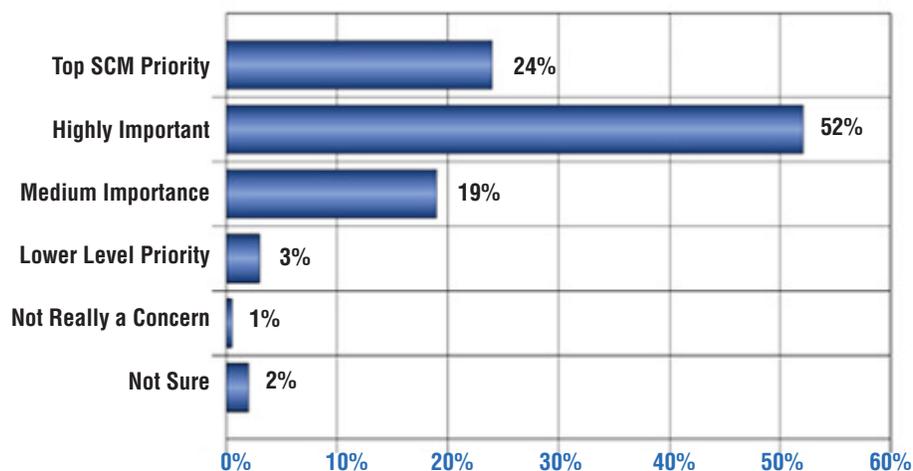
## Practices and Priorities

With that demographic data as background, we will now turn our attention to the core questions and responses relative to network inventory management.

We started by asking respondents just how high a supply chain priority improved network inventory management is for their companies.

The results speak for themselves: 24% called it the top supply chain priority, and another 52% said it was highly important. Just a handful of respondents said it was a low priority.

### Priority of “Inventory Management Excellence” in Your Company/Division

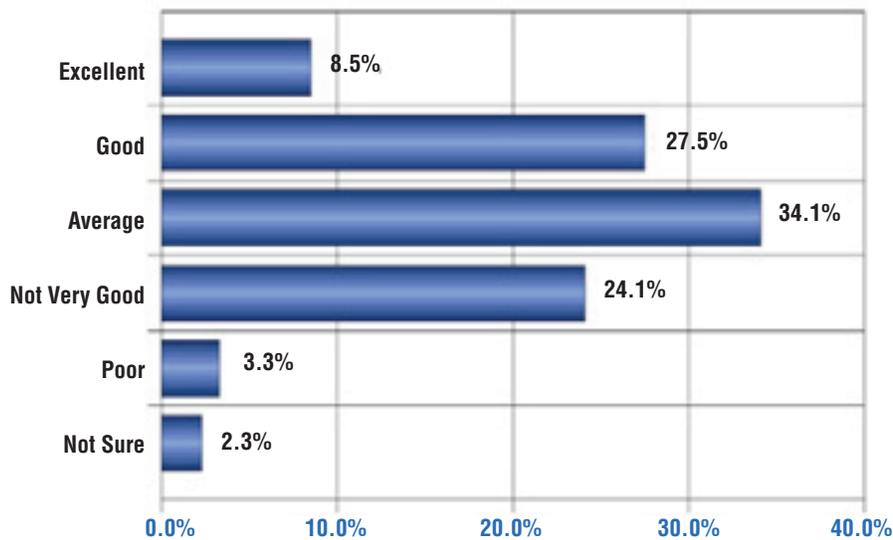


In the comments area of the survey instrument, a director of supply chain planning for one consumer goods company noted that “We are very highly focused right now at managing across the entire chain, which we have not really done well in the past. It’s the next natural thing after you optimize locally.”

We agree - but how do you get there?

We next asked respondents how well their current processes were for managing network inventories. The results are about what we might have expected: just 8.5% said their current processes have reached an “excellent” level, though 27.5% said their processes were “good.”

## Process Maturity for Managing Inventory Across Full Network



Importantly, however, just over 60% said their current processes were average or worse - meaning the majority of companies have a lot of work to do to tackle the network inventory problem holistically.

The story was much the same when it comes to the maturity of technology enablement companies have reached to manage complex network inventories.

**70%**  
*rated themselves as just average or worse in regards to process maturity for managing inventory.*

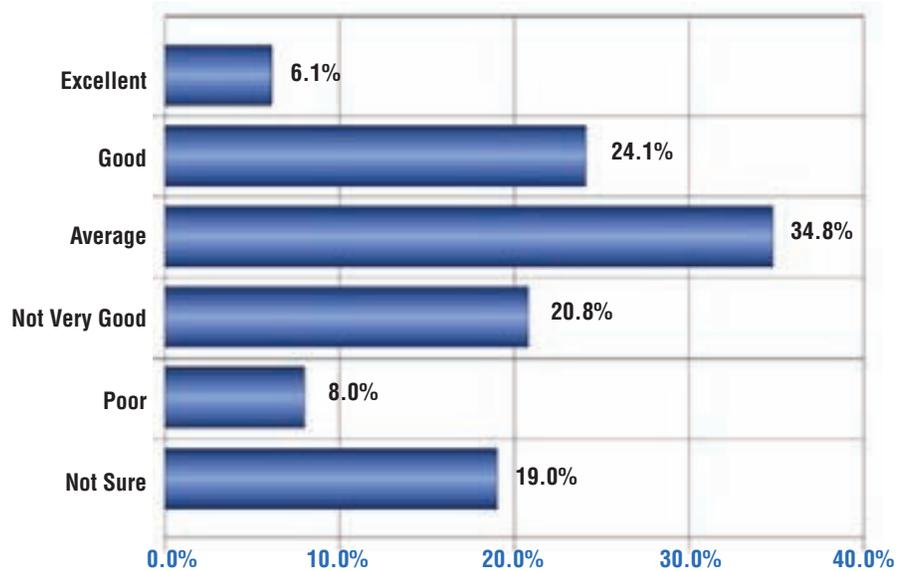
Here, just 6% of respondents put themselves in the “excellent” group, and 24% in the “good” category, both numbers down a few percentage points from the process maturity perspective; some 70% rated themselves as just average or worse.

Said one electronics industry respondent: “I think many of us have supply chain and inventory management technology that was built for a different time, or at least a different level of understanding. We need something new to manage this challenge effectively today.”

Another respondent added that “There is technology to do this well, but it can be hard to implement, and not many have done it.”

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### Technology Maturity for Managing Inventory Across Full Network



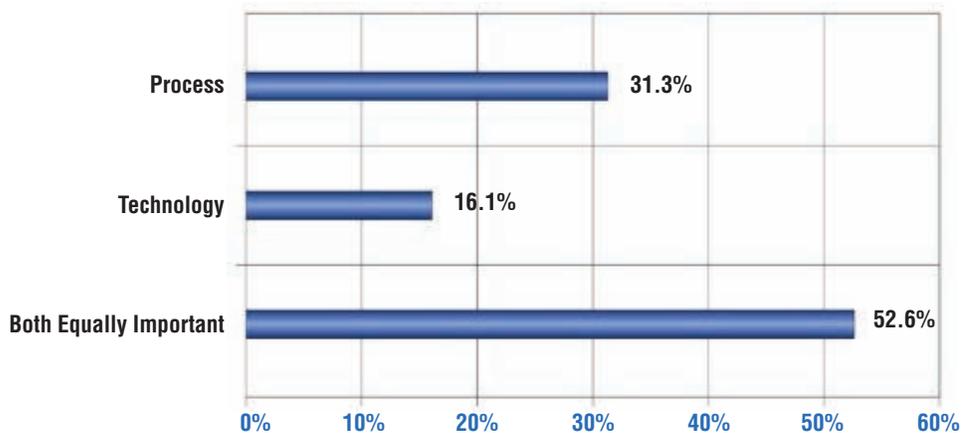
We also asked respondents on their opinion as to what was more important in terms of effectively managing network inventories, process or technology.

As shown in the chart below, a majority of 52.6% of respondents said that each area was equally important. 31% said process was more important, while 16% said that technology was more important.

But the answer to that question really depends on where you sit, as one respondent noted.

“Most companies have a number of people and process issues that they need to address to get better at network inventory management,” one consumer durables manager said. “But after you reach a certain level of process excellence, the only path left to get much better is new technology.”

### Process Versus Technology Importance



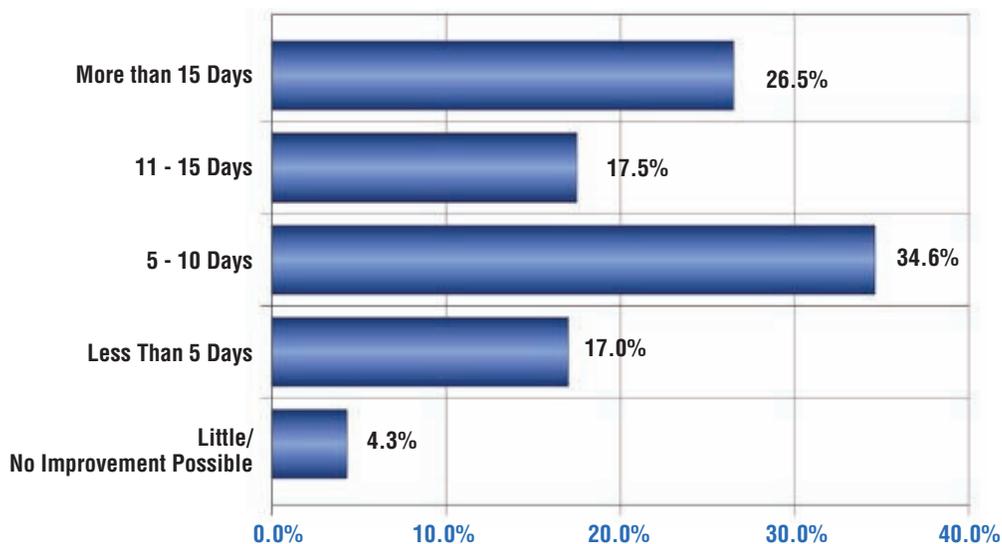
### Five Strategies for Improving Inventory Management...

We also wanted to understand what levels of inventory improvement respondents thought were possible in their supply chain networks - and the results were eye opening.

More than a quarter of respondents (26.5%) thought they could reduce inventory by 15 days or more - presenting a compelling opportunity.

All told, some 79% thought their inventory improvement capability was at least 5 days - representing huge improvements in cash flow and working capital reduction for those firms.

## Potential Inventory Reduction Through Process/Technology Improvement



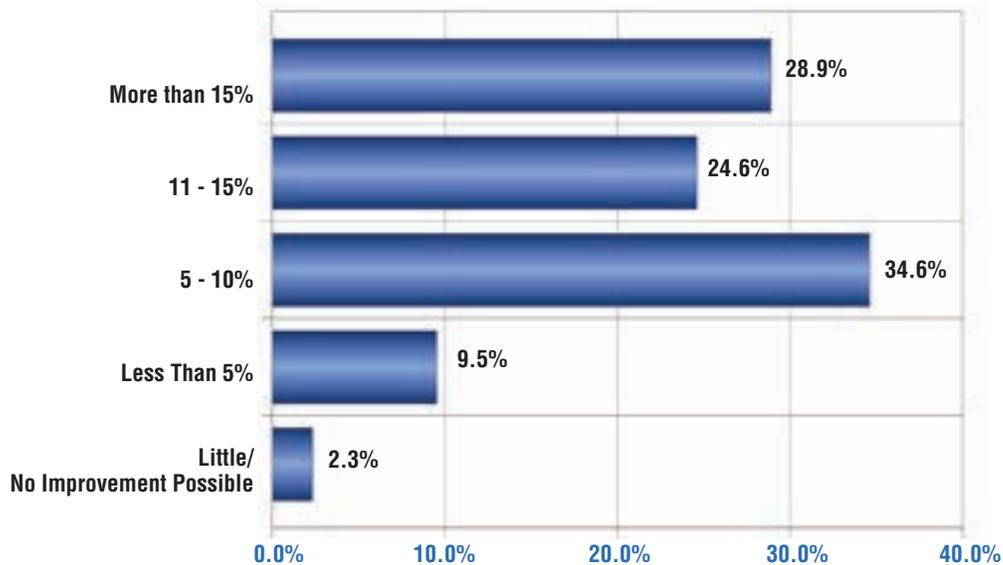
We also took another look at this question from a percentage standpoint, with similar results.

As can be seen on the next page, about 29% thought their total opportunities to reduce network inventory was at least 15% - meaning a company that carries a billion dollars worth of inventory could reduce that amount by \$150 million dollars, which in turn would increase cash flow by the exact same amount.

Using an inventory carrying cost of 10% (a conservative figure), that would translate into a bottom line improvement of \$15 million - representing the same level of profit impact as \$100-200 million in increased sales.

Again here, only a small percentage saw little opportunity for improvement.

## Potential Inventory Reduction Through Process/Technology Improvement



## What are the Barriers to Improved Network Inventory Management?

Companies obviously understand the potential opportunity to reduce network inventories, as illustrated in the last couple of charts above taken from the survey data.

Given that the prize is large, what is preventing companies from making those improvements?

We asked respondents to rate a number of potential barriers as being low, medium or high, as shown in the chart below.

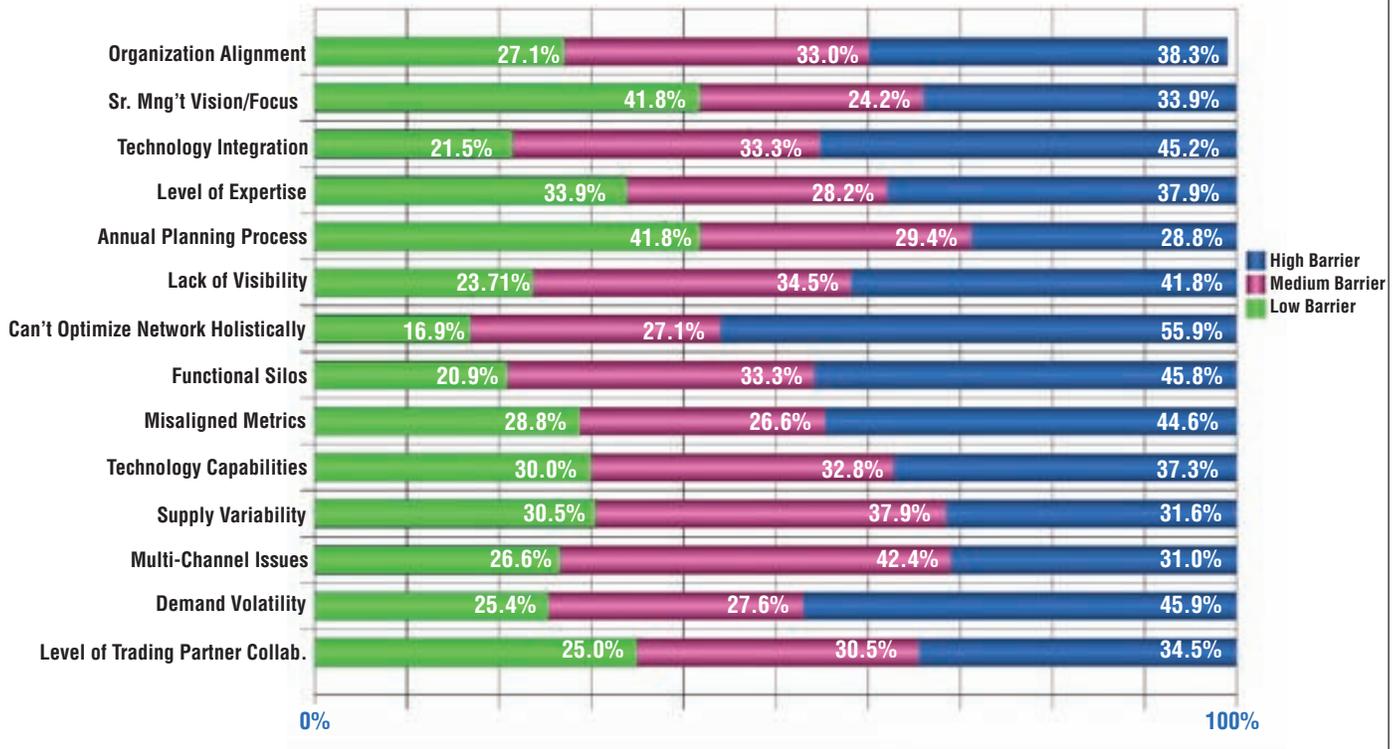
Some things stand out. For example, senior management vision/focus is not perceived to be an issue for most companies; nearly 42% rated it as a low barrier, and 66% combined rated it as either low or medium.

The annual planning process and supplier collaboration challenges also rated fairly low as barriers.

On the other hand, 56% of respondents cited their inability to optimize the network holistically as a high barrier.

Five Strategies for Improving Inventory Management...

## Perceived Barriers to More Effective Cross Network Inventory Management



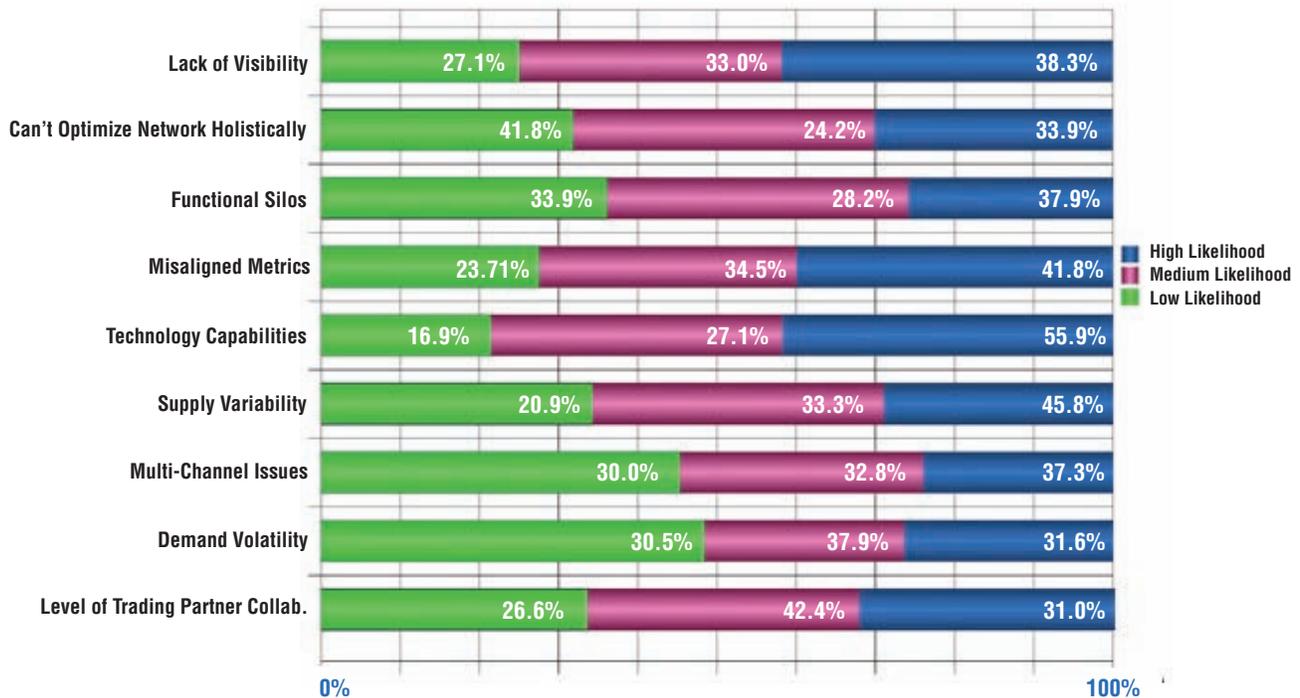
Other areas receiving high scores included lack of technology integration, having internal functional silos, misaligned metrics (related, no doubt, to functional silos) and demand volatility (as always seems to be the case).

Where do companies plan to invest to improve network inventory management? As shown on the chart on page 11 technology scored high, with improving supply chain visibility (41.7%) and general enhanced inventory management/planning technology (also 41.7%) listed as areas many respondents said they were quite sure to make investments in over the next 2-3 years.

We were most surprised that a low percent of respondents planned to make investments in improving multi-channel management - perhaps that area was viewed as a people/process issue that did not require much investment to improve. However, a look at the respondent companies planning to make investments in multi-channel management showed the vast majority were in either the consumer goods or retail sectors. The challenge of multi-channel management does not seem high yet in most other industries.

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## Where Companies Plan to Invest for Cross Network Inventory Management



### Summing up the Data

The survey results support our belief that growing supply chain network complexity is making it increasingly difficult to effectively managed inventories.

The vast majority of respondents see significant opportunities to reduce those inventories, but face a number of challenges to getting it done.

While there are many process improvements that can be deployed, the sheer scope and scale of managing network inventories “holistically” is a challenge that many believe will require a new level of technology support.

That can include the relatively new category of Inventory Optimization, one of the five ideas for improving network inventory levels we will summarize in the next section.

## **Five Strategies for Improving Inventory Management Across Complex Networks**

There obviously is no single bullet for improving inventory management in the face of these network challenges, and many companies continue to chase increasing forecast accuracy as a key weapon - and one often especially resistant to improvement.

Below, we summarize five other steps companies are taking to attack various aspects of the network inventory management challenge.

### **1. Get Much More Granular with Safety Stock Management**

Many companies today continue to use rather simplistic means to determine safety stock levels at different echelons of the supply chain.

The most common is a simple SKU segmentation approach in which products are put into three or sometimes four classifications (ABCD, for example) based on either volumes or value, and safety stock policies are then set the same across each of these categories.

Such an approach is not sufficient for today's complex supply chains. Leading companies have taken their safety stock policies much further in terms of both granularity and cycle times.

The most common of the process improvements is to use many more attributes associated with each SKU to in effect create a much larger number of item classes to which different policies are assigned - well beyond the standard three or four levels most companies still use. These attributes can include lead times, supply and demand variability, consumption patterns, criticality, velocity, and several others. The more dimensions a company uses, the greater the precision a company will have in managing inventories. It is not uncommon to see 10-12 dimensions being used in best-in-class companies.

This obviously requires a lot more work, both in terms of upfront analysis and tweaking of the policy settings over time, but can pay rich dividends in terms of both reducing inventories for the SKUs for which excessive safety stocks are held, and in some cases actually increasing safety stock levels for SKUs that are regularly experiencing out-of-stock conditions.

This more granular segmentation also clearly requires some level of skill in terms of identifying the appropriate attributes to use for the groupings, and in understanding how to best apply differentiated inventory policies. Here outside expertise may be required if a company is looking to make the move to higher level of safety stock management, as this is a relatively uncommon skill set.

*“There is no single bullet for improving inventory management... companies continue to chase increasing forecast accuracy as a key weapon...”*

### *Five Strategies for Improving Inventory Management...*

Leading companies are also increasing the frequency in which they review and tweak safety stock policies. Still today, some companies can go multiple years without a comprehensive review, other than occasionally moving a given SKU to a new classification when its volumes have changed dramatically.

Leading companies both review products and policies more frequently, and have a formal schedule for doing so. For example, they plan overall inventory strategies annually and then refine those during each monthly Sales and Operations Planning (S&OP cycle), as we discuss in the next section, but then also look at higher level demand and variability data quarterly and may tweak certain inventory parameters on a weekly basis.

This safety stock and inventory policy management challenge becomes even greater when a company considers the multi-echelon aspect. Many companies in effect hold redundant safety stocks at each level because they cannot look at the problem holistically, as is supported by the survey data in the first part of this report. Many companies also lack insight into where in a complex supply chain inventory buffers should optimally be held.

Meeting that challenge well is almost impossible to do manually today and really requires a new level of technology support, an area where the category of inventory optimization software comes in to play, as we discuss in the last section.

## **2. Add Inventory Planning to the S&OP Process**

While Sales and Operations Planning has been successfully employed as a process discipline by some companies for more than two decades, other firms are really just getting started or are just midway through their S&OP evolution.

Still, it is really only in the past five years or so that there has been widespread recognition that specific inventory decisions were often left out of the S&OP process. While S&OP delivered a “one number forecast” that the company could act on, supported by a high level supply plan that is capable of meeting that demand plan, specific inventory decisions related to those plans were often left out of the S&OP decision process. That usually meant middle managers were responsible for inventory decisions that could have impact on sales or cost in the millions of dollars.

The logo consists of the letters 'S', 'I', and 'O' stacked vertically in a large, bold, blue serif font. The letter 'P' is positioned to the right of the 'O', overlapping it, and is also in a large, bold, blue serif font. The letters are white with a blue outline and a subtle drop shadow.

*“...many have pushed use of the new term Sales, Inventory & Operations Planning (SIOP) to more forcefully drive home the need for the process to make policy decisions on target inventory levels needed to support the demand and supply plans.”*

### *Five Strategies for Improving Inventory Management...*

Recognizing that gap, many have pushed use of the new term Sales, Inventory & Operations Planning (SIOP) to more forcefully drive home the need for the process to make policy decisions on target inventory levels needed to support the demand and supply plans. In effect, this means senior company executives need to set the direction based on a given plan as to what the trade-offs are going to be between excess inventory levels and some amount of risk that there will be insufficient inventories to meet demand. This is especially critical for new product introductions, and for companies that have a lot of complexity in their product “mix.”

*“SIOP is not the cure-all for the challenges of inventory management... but it is a necessary change... to step forward and set a platform for other initiatives...”*

Some have argued that these inventory-related decisions were always inherent to the S&OP process. That may be true from a theoretical perspective, but was clearly often not the case in the actual monthly practice of S&OP. There are many case studies of companies which have transformed their processes from a traditional S&OP basis to an SIOP one with added steps related to inventory targets and which have achieved impressive results.

Moving to SIOP in practice if not in name is a process improvement that at one level is fairly easy to accomplish, with the right level of expertise in terms of how the new elements to the S&OP cycle will be added (See Sidebar on page 15).

However, most companies ultimately find that a strong level of technology support becomes necessary for robust S&OP performance, especially as decisions about inventory levels are added to the mix. This technology is usually in the form of “workbenches” and exception-based decision-making that provide supporting data for the supply and demand plans, and importantly, allow managers and executives to conduct a series of scenario analyses to understand options and how they would play out across supply, demand, and financial results.

SIOP is not a cure all for the challenges of inventory management across complex networks, but it is a necessary change to take some steps forward and to set a platform for other initiatives, in part by getting senior company executives more engaged in the inventory planning process.

## SIOP Adds One Step to Traditional S&OP Process

Below, we have added one additional step and one change in the output of the process to Gartner's original nine-step S&OP process to highlight what is different with SIOP.

- **Step 1: Collect sales and market input.** Gather data from sales and marketing using simple and intuitive electronic forms. Best-in-class processes review and accept input after applying a filter for bias based on an analysis of historical input.
- **Step 2: Develop a demand plan.** Using statistical analysis and/or management input, build a multi-period forecast plan. Key elements to focus on in the definition of requirements are the forecasting of new product introductions, product lifecycle forecasting, seasonality profiles, causal factors, promotion and rebate modeling, and revenue management.
- **Step 3: Refine demand consensus.** Compare the multi-period output of the statistically generated forecast against the various sales and channel partner forecasts to identify and understand exceptions. Use the outcome of this collaborative forecast as the base forecast for demand shaping in Step 4.
- **Step 4: Shape demand based on “what-if” analysis for demand and supply.** Develop plans and analyze opportunities for demand-shaping actions such as promotion planning, price management, contract compliance, and the timing of new product introductions. Package these key scenarios with the base-level forecast for operational planning in Step 5.
- **Step 5: Develop a constrained plan.** Using the forecasting output generated in Step 3, analyze the best alternative for the business based on profitability, revenue, customer service, and targeted inventory levels. Identify constraints, demand shortfalls, and capacity opportunities for the consensus meeting review.
- **Step 6: Conduct “what-if” analysis.** Determine tradeoffs on the measurements and identify demand-shaping opportunities. Evaluate the “what-if,” demand-shaping scenarios in Step 4 based on profitability, revenue, customer service, and inventory targets. Identify constraints, demand shortfalls, and capacity opportunities for the consensus meeting review.
- **Step 7: Inventory scenario planning and analysis: Set target inventory levels to support the plan and make decisions about where buffer inventories should be helping across the network.** 
- **Step 8: Develop a consensus plan.** Review scenario alternatives and gain consensus on the operating plan, including target inventory levels.
- **Step 9: Publish the constrained plan.** Communicate the constrained plan to the operational teams for execution.
- **Step 10: Measure the plan and publish the metrics.** During the month, measure the success of the plan and use this information as the starting point for the next cycle. Monitor plan success based on forecast accuracy, expected-versus-actual profitability, expected-versus-actual revenue, expected-versus-actual inventories, and expected-versus-actual customer service levels (e.g., perfect order or case fill rates).

### **3. Make Regular Use of Supply Chain Network Optimization Tools for Tactical Planning**

Supply chain network optimization tools have traditionally been used at a strategic level to support redesigns of an entire supply chain or distribution network. Often, such exercises were performed every 3-5 years, or triggered by a major change, such as a merger or acquisition.

There is a major change going on in this area, however, with more and more companies using the supporting network optimization technology tools not only in this strategic way, but on a tactical basis to support supply chain decisions on a quarterly or even more frequent basis.

The core function of these tools is to help companies make decisions about the network trade-offs between inventories, transportation costs, and customer service. But the reality is that as soon as the “optimal” strategic plan is set at a given point in time, it begins to degrade.

That truism is more pertinent than ever today, with rapid changes in oil and commodity prices, the uncertainties of globalization, and other dynamics challenging any current network strategy.

While changing the supply chain network at a high level is obviously a slow process, many changes *within* the network can and should be made on a more frequent and near continuous basis. Such decisions as:

- Which products should be made and sourced where?
- What is the current optimal trade-off between inventory and transportation?
- How should product flow within the existing network?

can all be improved with decision support from the network planning tools, as a variety of companies from Procter & Gamble to PepsiCo are demonstrating today.

While the potential improvements may come from transportation savings or other operating buckets, it is certainly likely that inventory improvements versus the baseline will also often be achieved.

What does making this change mean? It usually generally requires that instead of just “renting” a network optimization tool for a given planning process, that tool is acquired and brought in-house (though on-demand versions are also coming to market). But the point is that in either case, the tool becomes a permanent part of the on-going decision process, not used for a one time analysis.

Once the original supply chain network model is built, maintaining that model over time is comparatively easy, but does take some resources. Some companies maintain a small staff to support this process, acting in a “share services” capacity across multiple business units, but others can get by with just one person dedicated only part time to the effort.

Some consultants or software vendors themselves offer analysts that companies can hire to do the work instead of using internal staff.

### *Five Strategies for Improving Inventory Management...*

A few large companies have reported hundreds of millions of dollars in supply chain savings, much of it related to inventory, from investment in technology and staff to use network planning tools for continuous tactical planning. In today's highly dynamic environment, it would seem the business case to support such an investment would be strong for many large and even mid-sized companies.

#### **4. Consider Distributed Order Management Tools to Manage Multi-Channel Complexity and Reduce Inventories**

Both retailers and a growing number of manufacturers are dealing with the challenges of multi-channel management, primarily but not exclusively driven by web channels.

A substantial percentage of traditional retailers have already developed dot com channels, and a growing number of manufacturers are doing the same, as the once powerful fear of reprisals coming from competition with their retail partners is rapidly falling and more and more brand companies take to the web.

A variety of other channels, from vending machines to distributors, are increasingly also coming into the mix for many companies.

With dot com business especially, many companies have let web channels emerge as quasi-independent business units to enhance speed and flexibility. That, in turn, often means that the dot com unit maintains its own inventory. This is sometimes true for other channels as well.

While the overall independence often has real business advantages, especially at start up, the dual or more inventories can add real cost to the company overall.

As companies mature these new channels, they often decide to look at how multiple channels can be served out of one inventory pool.

There are a number of challenges to doing so, such as how forecasts are aggregated or allocation policies by each channel for that inventory are developed and enforced. These challenges can be tackled in many ways, one of which is a relatively new class of software called distributed order management, or DOM.

DOM solutions are about much more than inventory management; at their core they are designed to capture orders from multiple sources and identify the most efficient way to fulfill those orders. They enable the company to present a consistent face and process to the customer regardless of channel, if well implemented.

But as a part of that basic capability, some DOM solutions can also improve inventory levels in multi-channel environments.

*“A substantial percentage of traditional retailers have... developed dot com channels... a growing number of manufacturers are doing the same...”*

### *Five Strategies for Improving Inventory Management...*

Some, for example, have the capability to support inventory rules and policies by channel within common inventory pool, allowing companies to more quickly or aggressively pursue combined cross channel inventory strategies.

In addition, many solutions provide the ability to dynamically identify the optimal sourcing location, whether it be in the company's own supply chain network, or a possible drop ship directly from a supplier. By having more sourcing flexibility, or converting a large percentage of "stocked" SKUs to drop ship items, a company may also be able to take a good bite out of current inventory levels.

Distributed order management has been the province of mostly best-of-breed vendors, and normally sat over top of existing order management systems. It is an ideal solution for companies with complex channel issues, or where a company is running multiple order management systems and looking for a single front to customers across channels. Now, even large ERP providers themselves have released their own DOM solutions.

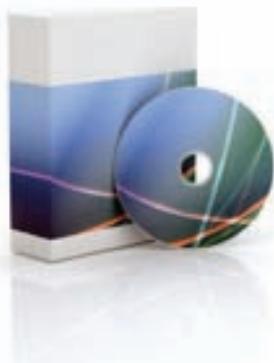
DOM software varies considerably in capabilities and focus, and so an evaluation of different alternatives needs to be made with care to ensure the right fit with a company's current needs - and just as importantly with its future direction.

## **5. Step Up to Inventory Optimization Software**

Probably the most aggressive step a company can take to manage multi-echelon inventory challenges is to adopt a relatively new category of software solution called inventory optimization, or IO.

Traditional supply chain planning software really only optimizes inventory levels one node or echelon at a time - it really is not concerned with the impact on up and downstream inventories. It focuses primarily on "local" optimization.

Inventory optimization software, which has been around for about a decade, looks at the inventory problem holistically, considering the optimal inventory levels from raw materials to finished goods and even distribution channels simultaneously, so that network inventory levels themselves are optimized, not just an individual node or channel.



*Inventory optimization software... looks at the inventory problem holistically, considering optimal inventory levels from raw materials to finished goods and even distribution channels simultaneously, so that network inventory levels themselves are optimized, not just an individual node or channel.*

### *Five Strategies for Improving Inventory Management...*

Most of these solutions also use what is called “probabilistic” modeling, which means rather than relying on “discrete” or single number forecasts for supply and demand, IO software uses history and other factors to consider the probability of different lead times and demand patterns, providing a richer inventory plan.

Many companies have achieved significant results from their IO implementations, as the survey data supports, often reducing overall network inventory levels by well into the double digit percentages.

IO software also lets companies manage the complex process of setting inventory policies and tuning those policies at a SKU level much more effectively by enabling them to move to a much more automated process. The focus turns to “management by exception” versus trying to deal with these policies and settings across hundreds or thousands of SKUs using a more manual, spreadsheet-based approach.

But getting to these kinds of results, frankly, is often not easy. The holistic nature of the analysis and recommendations means a company has to get wide buy-in to the program across its supply chain. Sometimes inventories reduced at one level come at the “cost” of more inventory at another, which might contradict existing goals and measures. Relatively few managers inside a company are probably well-versed in IO solutions.

We believe that inventory optimization software will become commonplace over the next five years, but that companies will usually need skilled guides to help them reach the destination smoothly and effectively.

*“Many companies have achieved significant results from their IO implementations... reducing overall network inventory levels... into the double digit percentages.”*

## **Summing It Up**

We are clearly in an era of unprecedented supply chain network complexity.

Our survey data supports the many and diverse challenges supply chain managers are facing to get better control of inventories across these network challenges - and that they are looking for solutions and significant potential from doing so.

Many companies have taken traditional approaches, such as efforts to improve forecast accuracy or development of traditional S&OP processes about as far as they can go. New tools and technologies are needed to fight the next rounds of the ongoing inventory battle.

The majority of survey respondents also believes that process and technology improvements were equally important in better managing network inventories.

### *Five Strategies for Improving Inventory Management...*

We agree, though with some qualifiers. Companies that have some immature processes, such as not formally including inventory targets as part of an SIOP program, clearly have a major process opportunity in front of them.

But the size and complexity of the network inventory management challenge today means that newer technology tools, such as distributed order management or inventory optimization software, may need to be a large part of the answer.

Of course, that new technology will bring its own process (and people) challenges, but we believe for most the benefits will be well worth the efforts and investments, though again caution that experienced hands will often need to be part of the team to ensure success.

For many companies, the “low hanging fruit” is nearly gone. Step changes in inventory management effectiveness will mean use of relatively new tools and techniques.

It is time to start looking at the opportunities now to see which might have the greatest impact on your supply chain success.

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CSCO (Chief Supply Chain Officer) Insights offers research and analysis focused on providing actionable information and intelligence to senior supply chain executives and those aspiring to reach executive levels. The research arm of Supply Chain Digest, the industry’s leading on-line publication and web site, CSCO Insights is becoming the preferred source of insight for supply chain leaders.

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