Hot Topic Report

Finished Goods Inventory Management

How Today's Outcomes Measure Up to Past Results

Tompkins Supply Chain Consortium

Benchmarking & Best Practices

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Finished Goods Inventory Management

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Introduction

The *Finished Goods Inventory Management Report* is based on a high number of responses from the 2013 survey on this topic. The popularity of the survey indicates how relevant and important finished goods inventory knowledge is to all industries and market segments, particularly amid today's lingering financial conditions. Goals of this report include:

- How companies organize to manage finished goods inventory;
- Who has responsibility for finished goods inventory;
- How finished goods inventory targets are set and by whom;
- What performance metrics are used;
- How finished goods inventory and customer service were impacted in 2012;
- What potential improvements are being considered; and
- What specific practices are used for finished goods inventory management.

Comparisons are made throughout the report to similar surveys completed in 2010 and 2012. The closing summary outlines the most significant findings, but readers are encouraged to draw their own conclusions from the data in this report.

Click here to download the 2010 and 2012 reports on finished goods inventory management.

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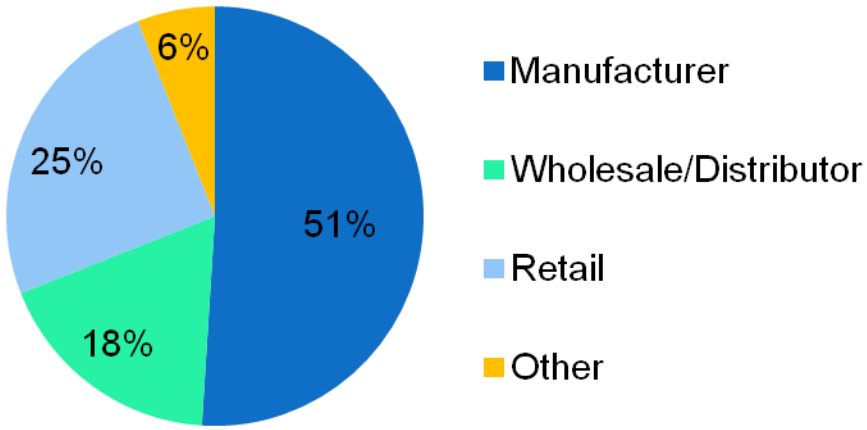
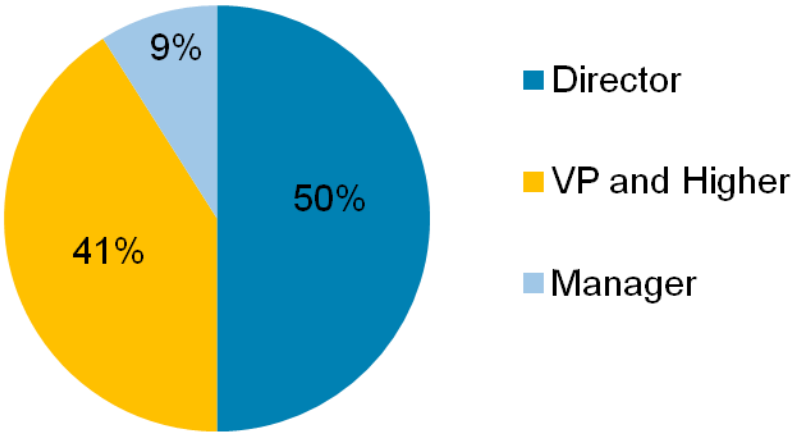
Survey Participant Demographics

Respondents by Industry



Respondents by Title



- Fifty-one percent of survey respondents are from manufacturing companies, 25% from retailers, 18% from distributor organizations, and 6% from other industries.
- There is an even distribution of respondents across supply chain titles, representing all organizational levels of the supply chain.
- Companies range in size from several hundred million dollars in revenue, to those approaching $40 billion in revenue, with an average of approximately $6 billion.

Organizational Responsibility

Organizational Responsibility			
	Corporate-Wide	Division-Wide	Geographically
Planning Inventory Needs	50%	31%	19%
Determining Inventory Levels	47%	31%	22%
Distributing Inventory	36%	32%	32%
Controlling Inventory	41%	33%	26%

Inventory functions are most often completed at the corporate level than at the division level or geographically. This is a similar result to the 2010 and 2012 survey results. The greatest difference is there is more corporate-wide organizational responsibility for inventory functions than in the past. However, controlling inventory is more of a geographical responsibility than in previous surveys, with an increase from 17% in the 2012 report to 26% this year.

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Geographical Responsibility

Geographical Responsibility			
	Domestic Only	International Only	Domestic and International
Planning Inventory Needs	33%	3%	64%
Determining Inventory Levels	33%	3%	64%
Distributing Inventory	29%	2%	69%
Controlling Inventory	33%	4%	63%

In a majority of companies that have an international component for finished goods inventory, one organization handles both domestic and international finished goods inventory. While this is the same conclusion reached in previous survey responses, this is the first time an international only responsibility has had any responses, indicating some companies have an organization with international only inventory responsibility.

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Setting Finished Goods Inventory Targets

Departments/Organizations That Set Inventory Targets		
	100%	**Shared**
Procurement/Purchasing	10.0%	33.3%
Merchandising	3.2%	14.3%
Manufacturing	1.6%	27.0%
Distribution Operations	3.2%	19.1%
Customer Service	3.2%	15.9%
Inventory Management	25.4%	36.5%
Forecasting	6.4%	31.8%
Marketing	1.6%	19.1%
Retail Operations	1.6%	12.7%
Sales	1.6%	28.6%
Finance/Accounting/Controller	1.6%	34.9%
Executives	6.4%	28.6%
Logistics and Transportation	4.8%	19.1%

- Not surprisingly, the inventory management organization in many companies is responsible for setting finished goods inventory targets, either by themselves or as a shared responsibility.
- Procurement/Purchasing and Finance/Accounting/Controller have a major impact on setting inventory targets compared to Executives, Sales, Forecasting, and Manufacturing in previous surveys.

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Accountability for Finished Goods Inventory Levels

Department/Organization That Is Accountable for Inventory Levels		
	100%	**Shared**
Procurement/Purchasing	14.3%	31.8%
Merchandising	3.2%	15.9%
Manufacturing	9.5%	31.8%
Distribution Operations	7.9%	14.2%
Customer Service	1.6%	12.7%
Inventory Management	20.6%	33.3%
Forecasting	6.4%	28.6%
Marketing	1.6%	12.7%
Retail Operations	6.4%	6.4%
Sales	3.2%	22.2%
Finance/Accounting/Controller	1.6%	23.8%
Executives	7.9%	20.6%
Logistics and Transportation	6.4%	15.9%

Several different organizations within companies have responsibility for the levels of finished goods inventory. The Inventory Management Department is most likely to be accountable for the inventory level, but many functional areas are also involved in managing finished goods inventory. This closely mirrors the results of previous surveys, but this year there is a much greater presence from Procurement and less involvement from Sales.

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Charged For/Owns Inventory

Department/Organization That Is Charged for/Owns Inventory		
	100%	**Shared**
Procurement/Purchasing	12.7%	23.8%
Merchandising	4.8%	9.5%
Manufacturing	11.1%	28.6%
Distribution Operations	9.5%	20.6%
Customer Service	1.6%	11.1%
Inventory Management	17.5%	28.6%
Forecasting	9.5%	20.6%
Marketing	1.6%	15.9%
Retail Operations	4.8%	11.1%
Sales	4.8%	15.9%
Finance/Accounting/Controller	3.2%	20.6%
Executives	4.8%	15.9%
Logistics and Transportation	6.4%	12.7%

Departments that get charged for or own finished goods inventory are spread out among several functional areas. Inventory Management, Manufacturing, and Procurement are the top areas in the 2013 survey. This differs considerably from previous surveys, in which Executives, Forecasting, and Sales played larger roles.

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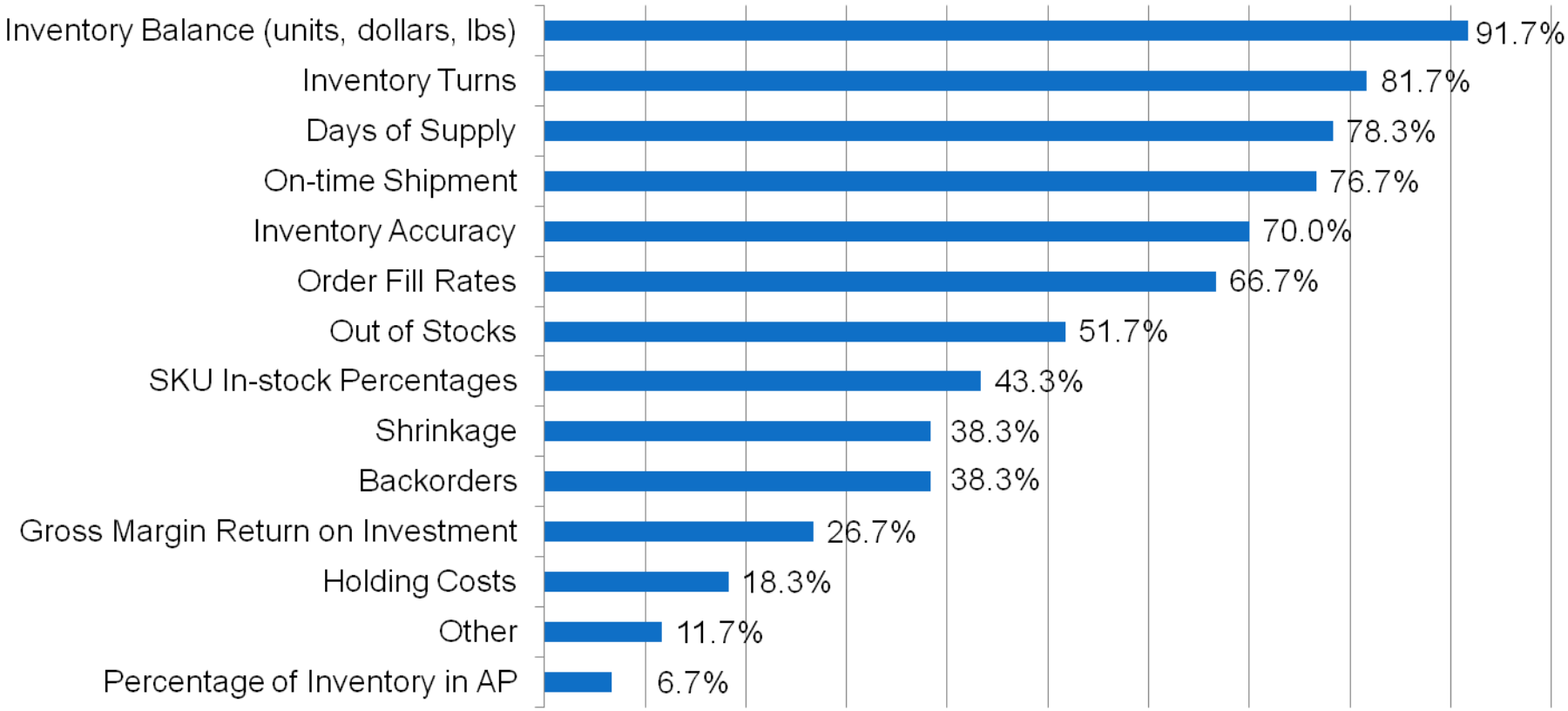
Usage of Finished Goods Inventory Metrics

Percentage of Respondents Utilizing Finished Goods Inventory Metrics



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Usage of Finished Goods Inventory Metrics

- Companies most frequently track the actual inventory balances (dollars, units, or pounds) of finished goods inventory. Compared to the 2010 and 2012 surveys, this is the first time this metric was highest.
- Inventory turns is the second most selected, at nearly 82%. In previous years, this was the top inventory metric.
- Both days of supply and on-time shipment are used by more than three-quarters of respondents, showing higher percentages than in the past.
- Inventory accuracy is also a significant metric according to 70% of respondents. Last year, it was selected by 73% of respondents and was ranked third in importance.
- More than two-thirds regularly use the order fill rates metric.

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Finished Goods Inventory Dollars as a Percentage of Sales

Finished Goods Inventory Dollars as a Percentage of Sales					
	>10% Reduction	1-9% Reduction	No Change	1-9% Increase	>10% Increase
Year-End 2012 vs. Year-End 2010	24.5%	18.4%	20.4%	28.57%	8.2%
Year-End 2012 vs. Year-End 2011	19.2%	36.2%	21.3%	19.2%	4.3%

- More than a third of companies experienced a 1-9% decrease in finished goods inventory dollars as a percentage of sales between 2011 and 2012. Overall, these results indicate a significant decline in finished goods inventory dollars as a percentage of sales during 2012.
- From 2010 to 2012, there were decreases in finished goods inventory as a percentage of sales, indicating that 2011 saw fewer inventory dollars to sales.
- This year's responses are not as clear as previous years, when most companies clearly made major inventory reductions related to sales.

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Reasons for Finished Goods Changes: 2012

- General reasons for higher sales than finished goods inventory levels:
  - Sales growth for many companies
  - Better tools and technology for managing inventories (e.g., sales and operations planning)
  - Improved forecasting from customers
  - Increased focus on inventories
  - Improved planning practices and tools
  - Cost reductions and increased investments

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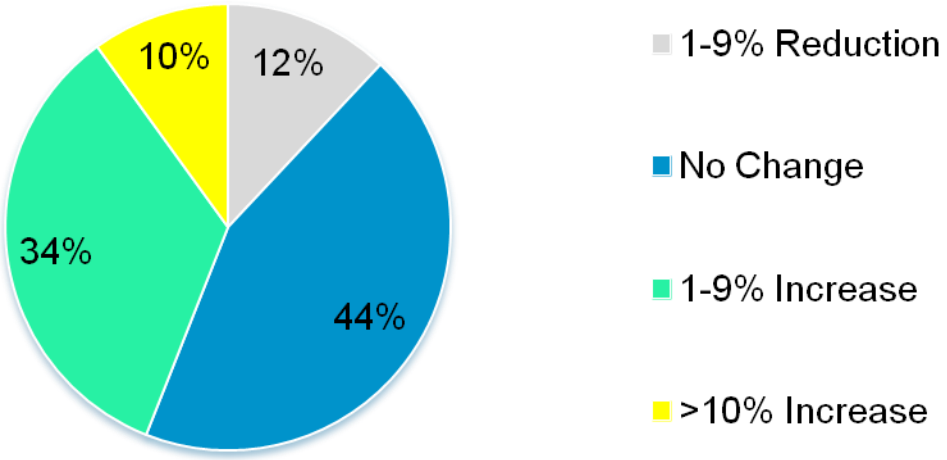
Customer Satisfaction Changes

Changes in Customer Satisfaction Levels from Year-End 2011 to Year-End 2012
(as measured by order fill rates or equivalent measure)



- Reduced inventory levels do not appear to have a major negative impact on service levels.
- Customer satisfaction levels increased for 44% of companies and remained the same for 44%. Twelve percent saw a decline.
- Previous surveys had similar results, but 2012 data showed a larger amount of companies that improved their service levels than in 2013. This year's survey is more comparable to 2010 results.

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Finished Goods Inventory Improvement Potential

Potential for Finished Goods Inventory Improvement			
	Minor	**Moderate**	**Major**
Inventory Dollars	33.3%	41.7%	25.0%
Holding Costs	61.2%	34.7%	4.1%
Inventory Turns	40.8%	46.9%	12.2%
Customer Satisfaction	46.9%	40.8%	12.2%

- Responses are fairly conservative related to the amount of opportunity for finished goods improvement in the future. The majority of respondents expect a moderate or minor opportunity.
- A large percentage of companies did not answer this question, which may indicate they are uncertain about the future inventory improvement potential or believe it is negative. This trend is mirrored in all three finished goods inventory surveys.

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Areas of Change for Finished Goods Inventory

Areas Needing Change							
	Suppliers	Policies	Processes	Logistics	Technology	People	Customers
Inventory Dollars	49%	51%	74%	34%	49%	43%	23%
Holding Costs	36%	40%	67%	47%	42%	36%	13%
Inventory Turns	48%	50%	71%	40%	56%	52%	23%
Customer Satisfaction	33%	51%	71%	47%	47%	49%	44%

- Process changes is by far the most often identified area that needs improvement. The second area that needs the most changes depends on the metric:
  - Inventory policies impacting inventory dollars
  - Inventory policies impacting customer satisfaction
  - Technology impacting inventory turns
  - People impacting inventory turns
- The greatest movement was with customers. This area needed less change than previous years.

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Processes for Inventory Management

Inventory Practices	Percentage of Responses
Replenish When It Runs Low	94.1%
Have Formal Process to Forecast New Stock-keeping Units (SKUs)	78.4%
Have Formal Process for SKU Discontinuation	74.5%
Have Formal S&OP (or SI&OP) Process	74.5%
Obtain Access to Any Point of Sale (POS) Information	72.6%
Make Use of Product Hierarchy to Increase Forecast Accuracy	64.7%
Do Forced Allocations	60.0%
Have an Internal Reverse Logistics Process	58.8%
Do Replenishment and Forced Allocations	58.0%
Do Markdowns	52.9%
Do Returns and Markdowns	47.1%
Determine Optimum Safety Stock Working Capital vs. Lost Gross Margin	29.4%
Have Declining Net SKU Base	23.5%

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Processes for Inventory Management

- Most inventory management practices identified by respondents are being performed by nearly 50% or more of respondents.
- Forecasting new SKUs and SKU discontinuation have long been an issue for operations, but a high percentage of companies state they have processes in place. And this percentage has grown since last year's survey.
- S&OP processes continue to be discussed, and a majority of companies already have a process in place.
- Point of sale (POS) data is becoming readily available. A much higher percentage of survey respondents are using POS information for finished goods inventory management. It is not clear how effectively this data is being used, but the percentage of companies that have access grew from 48% last year to more than 72% this year.
- The overall results of this survey are different for several processes. Percentages across the board are also higher, which indicates progress has been made by many companies to improve finished goods inventory practices.

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Comments from Survey Participants

Specific comments from respondents are included below, including finished goods inventory practices and barriers they feel were important to driving change in 2012.

- **Sales and Operations Planning (S&OP):** Companies indicate S&OP and process improvements are key to improved performance.
- **Inventory Management:** Dead inventory reductions, SKU rationalizations, and improved planning are some of the drivers of reduced 2012 finished goods inventory levels.
- **New Products:** Several survey participants pointed to new products in 2012. The new products also brought new customers and new markets.
- **Business Conditions:** Last year business conditions clearly varied, with some companies seeing increasing sales and others seeing lower sales and a slower economic recovery. One comment revealed a swing toward higher value products helped 2012 sales.
- **Forecasting:** Some companies saw improvements to forecasting, while others did not. The concept of demand pull was also mentioned by a couple companies.
- **Mergers and Acquisitions:** The business climate made 2012 a year full of acquisitions, which can have either a positive or negative impact on finished goods inventories.
- **Management:** There was a strong push for several companies to focus on inventory and optimize results. Investments were made in 2012 to drive improvement initiatives.

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Closing Summary

- Finished goods inventory management is performed at the corporate level. However, division-wide management is often found in very large organizations. Organizational responsibility is rarely defined geographically.
- The Inventory Management Department is usually the organization responsible for setting finished goods inventory targets. Likewise, this department is the one typically accountable for finished goods inventory levels and is most likely to be charged for or own inventory. At times, various supply chain functions share these responsibilities, including Procurement, Finance, Manufacturing, and Forecasting.
- Inventory balances, inventory turns, and days of supply are the top three measurements used for finished goods inventory.
- Overall, companies indicate reductions in finished goods inventory dollars as a percentage of sales in 2012. Sales growth, better tools and technologies for managing inventories, as well as improved forecasting, are the primary reasons for further reductions in finished goods inventories.
- Customer satisfaction levels (as measured by fill rates) have also increased, which indicates that cutting finished goods inventory did not negatively impact customers.
- Improvements in processes is the greatest area for change, followed by policy changes.

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Closing Summary

Comparisons with 2010 and 2012 Surveys

View the 2010 and 2012 Reports Here

- Controlling inventory is now more of a geographical responsibility, with a percentage increase from 17% in the 2012 report to 26% this year. This trend indicates that as organizations become more global, geographies play a stronger role in controlling inventory.
- In the 2013 survey, Procurement/Purchasing and Finance/Accounting/Controller have a major impact on setting inventory targets compared to Executives, Sales, Forecasting, and Manufacturing in previous surveys.
- Based on 2010 and 2012 surveys results, companies would like to see more collaboration and sharing of responsibility for setting finished goods inventory targets, accountability for inventory levels, and who is charged for/owns the inventory.
- The metrics used for finished goods inventory have changed from previous surveys. The highest metrics this year are inventory balances, inventory turns, and days of supply.
- While improvements have been made, strong potential exists for further reductions in inventories and improvement in customer service. Business conditions are better, but not back to the levels of 2008.

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Closing Summary

Comparisons with 2010 and 2012 Surveys

- Responses over the past three years prove that customer service levels can increase while reducing finished goods inventories. This is a challenge, but one that most companies are overcoming.
- Improvements in processes are even more key in finished goods inventories going forward. In this year's survey, processes rank first across all inventory metrics for areas to improve.
- Forecasting new SKUs and SKU discontinuation have long been an issue for operations. However, a higher percentage of companies than last year say they have processes in place.
- The 2013 survey has a significant increase in the percentage of respondents who have access to POS information.
- Percentages are higher in most surveyed areas, indicating progress has been made by many companies to improve finished goods inventory practices.

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Report Authors

To learn more about finished goods inventory management, as well as benchmarking and best practices, additional resources are available to members through the Supply Chain Consortium: www.supplychainconsortium.com.

Qualified companies may join the Supply Chain Consortium's LinkedIn or Xing Group: www.supplychainconsortium.com/rc/connections.asp

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