

IBM Cognos Software Demo Transcript Supply Chain Performance Management Online Demo

Performance Challenges

HOY: Hello, my name is Paul Hoy. I'm the Director of Manufacturing Industry Solutions for Cognos Corporation. I'm going to address an area that our manufacturing customers are placing great emphasis on: supply chain performance management.

Typically we see our customers addressing a number of critical supply chain challenges. Their customers require increased service levels including lower prices, reduced lead time, and the ability to change demand often right up to the time of shipment.

Cost control has always been critical, but today manufacturers find it more urgent than ever. They must reduce the cost of goods sold without impacting service levels. Supplier relationships are more critical than ever as manufacturers move to outsourced and co-packed production models. Globalization and offshore production initiatives further challenge the ability to manage these extended supply chains.

Finally, manufacturers strive to make their supply chains more predictable and reliable. Consistently meeting requirements is crucial to success in today's highly competitive environment, yet the very nature of a flexible, extended supply chain makes this predictability difficult.

Manufacturers are turning to supply chain performance management solutions to address these challenges through a number of key initiatives. Improved visibility into customer demand allows supply plans to be more closely driven by the customer. The goal is to take this linkage between the customer and the supply plan and drive it all the way through to suppliers through closer collaboration.

Manufacturers look to optimize their supply network more holistically. This requires balancing inventory across the entire supply chain, taking into account goods in production and distribution centers, as well as their customer locations. Accountability is being driven throughout the organization in order to identify interdependencies, as well as clearly defined responsibility for performance.

Finally, balanced metrics are being implemented to assess the entire supply chain performance. Rather than focusing solely on inventory or customer fill rates, the balanced approach allows monitoring of all key performance indicators.

We all know that the supply chain is a tightly integrated operation, yet most manufacturers have transactional systems that address each of the major areas of purchasing, production, distribution and customer fulfillment, typical supply chain metrics don't monitor an integrated approach to customer delivery.

Frequently the first sign of a supply problem is a breakdown in delivery to the customer. Unfortunately, this is the most expensive and painful time to fix supply breakdowns. In reality, these customer service breakdowns typically occur due to problems much further up the supply chain. In order to anticipate these breakdowns and take corrective action, you need visibility that connects your entire supply chain.

The process of managing supply chain requires a holistic view of the entire organization. At the most basic level the challenge is simple: balance supply and demand. The complexity comes through the need to monitor and communicate demand changes up the supply chain and identify potential supply disruptions at the earliest possible moment.

Careful monitoring of inventory levels across the entire enterprise allows cost effective deployment of finished goods. Successful implementation of an integrated, balanced supply chain performance management application allows you to favorably impact profitability, customer service and resource utilization.

The goal is to answer the three fundamental questions that drive supply chain performance: how are you performing against your critical supply chain metrics? If there are breakdowns in any aspect of your supply chain, why are the breakdowns occurring? What is the root cause of supply disruptions? And finally, what should you be doing to correct the situation and get back on track?

There are numerous challenges that inhibit your ability to answer these questions, however. Each department, function and process has unique requirements to operate efficiently, and typically activities that optimize one of these functions may work against holistic supply chain optimization.

This situation is further complicated by the fact that these functional areas frequently have a variety of transactional systems implemented. A complete view of supply chain performance requires collecting and analyzing information from numerous systems, data sources and spreadsheets.

Finally, the outsourcing that makes supply chains more cost effective frequently comes at the expense of timely information and the ability to directly control production and distribution operations. As supply chains become more global in scope, lead times increase and early access to performance information becomes more critical.

The fragmented approach to transactional applications leads to a disjointed approach to performance analysis. Various indicators may tell you how you are doing, yet they may not provide early enough warning to take corrective action.

These indicators frequently are not related to the information that you need to quickly assess why a specific breakdown is occurring, and identifying alternatives is often a manual process and it is next to impossible to assess the cost and delivery impact of these potential changes on the rest of the supply chain.

An integrated approach to supply chain performance management bridges these information gaps, however. Scorecards and dashboards constantly monitor performance against your key supply chain metrics. Business intelligence delivers the analysis necessary to identify the root cause of problems.

Integrated planning scenarios allow you to assess the cost, resource and customer impact of alternative scenarios necessary to react to changing business conditions. The result is an integrated approach to supply chain performance management that allows you to be flexible, responsive and efficient.

Let's look at a demonstration of how an integrated supply chain performance management solution provides the visibility and analysis necessary to improve your supply chain performance.

SCPM Demo

Many manufacturers seeking to improve supply chain performance elect to use scorecards as the most effective means to gain overall visibility. Here you are looking at an example of what one such scorecard might look like.

(00:13)

On the left you see that you've devised a system that has a roll up into a global view of your operations. In this case, you have a total top line view of operations, a breakdown into different geographic areas.

Within the U.S. division, a breakdown that includes multiple plants and co-packers; and finally, within each plant a variety of levels of operational details including production lines and departments and divisions. You have complete flexibility in terms of how you define this metrics, as well as the way the metrics roll up.

(00:48)

At the Philadelphia plant level you see in the upper right that there's a total of 23 metrics that define Philadelphia performance. At the U.S. division, you've identified 22 key metrics, while globally there are 17 key metrics that you utilize to assess supply chain performance.

(01:08)

On the right portion of the screen each of the metrics is identified by a name, a current status indicated in red, green and yellow, as well as a trend indicating how that metric is performing over time. Each of the metrics has an associated actual value compared against the target with a variance calculated. Therefore, you can easily go through and identify which of your key metrics are performing poorly and in need of attention.

(01:36)

In this case, you're looking at all of the metrics relevant to the global operations, but perhaps you wish to filter them down further. You can look at just those metrics that are

performing poorly, or if you wish to take a proactive orientation, you can look at just those metrics that are getting better or getting worse over time.

(01:55)

In this case, even though some of the metrics are still in the green and yellow tolerance range, they're trending downward. Left unchecked, they're going to eventually become problems. This type orientation allows you to anticipate problems and act proactively.

(02:10)

You may also wish to apply groupings to the metrics to make it easier to look at processes. For example, here you've grouped your metrics by functional areas, by customer service, logistics manufacturing.

You also see that the same metrics can be looked at along the levels of the score model looking at those metrics associated with planning, sourcing, making and delivering goods.

(02:31)

By clicking on the functional area, you can identify the metrics related to that functional area and get a summarized view of the performance within each of those areas. For example, here you see that 41 customer service metrics are currently underperforming, seven are performing marginally, while 38 are performing within tolerance. This allows you to easily assess the way that wish to view your metrics and to get a look at the metrics performing in a way that most makes sense for your attention.

(03:02)

Perhaps instead of looking at detailed metrics, you wish to look at a graphical dashboard approach. What you've done here is looked at metrics aligned with overall delivery performance worldwide. And what you see is that there's a number of metrics that affect this.

(03:18)

For example, Mexico City is operating within tolerances as indicated by the green. Moving over to Birmingham, England, and hovering over the icon, you can see that your target performance is 98 percent, you're performing at the 95 percent level, but the yellow indicates it's still within acceptable tolerances.

In Philadelphia, however, you can identify the fact that you're a full order eight percent under performance. Looking at the trend, you can see that the trend of that performance has been down and significantly under the green targets. Clearly this is a metric that you're going to wish to explore further.

(03:56)

By clicking on the icon you can drill down to what's referred to as an impact diagram. Here we see that the Philadelphia full order shipped complete affects several

downstream metrics including the Philadelphia plant order fill rate, as well as the full divisional performance of the US division.

Moving to the left, you can see that the full order fill complete is itself impacted by three metrics two of which, yield inventory accuracy, are performing well; the third, days of supply of finished goods, which is not performing well. By further expanding days of supply of finished goods you can see that the problem is forecast accuracy for the Philadelphia plant.

(04:41)

Perhaps you wish to explore this a little further. You can now click on the forecast accuracy and drill down into details within that area. By looking at the historical view, you can see that not only is forecast accuracy off for this year, it's been a recurring problem over the past two years.

(05:00)

Supply chain performance management is a highly collaborative activity. In this case in the upper left I see an indication that the metric owner has posted comments addressing this performance. In this case from a workflow perspective all users see those comments.

In particular, the problem has been identified as under forecasting the promotional uplift the planning organization is implementing a monthly review to address that. You further see that there's detailed reports available addressing the performance and providing more clarification as to the performance.

(05:37)

You have the ability to see a number of prepackaged and preplanned PDF reports describing a metric or you have the ability to perform ad hoc analysis in an integrated environment.

In this case, we're going to look at the prepared reports and see a PDF that was presented identifying some of the variability. In this particular case, if I look at forecast usage difference you see that the majority of the variance comes from one particular product, my Wavestation 5000 line. Also the variety is occurring primarily in one particular geographic area. Further detail on the report clarifies the variability, and I can see some numeric specifics.

(06:21)

Perhaps you wish to drill down further and see some of the customer impact of this product. For this particular customer, you can see that the Wavestation product line makes up the vast majority of what this customer orders. Further, if you look at the demand patterns over time you see that there's great variability in the usage pattern.

(06:42)

In looking at the upper right, you've elected to include the channel and sales organization of the folks responsible for this particular customer product combination. Based upon the variability of what you're seeing you may wish to spend more time understanding the product demand trends so that you can remove some of the variability for this particular customer.

(07:03)

In summary, what you've done is looked at top level metrics that define your overall supply chain performance for your entire global organization. You identified a problem in terms of shipping orders complete. You traced the orders back and the source of the problem back to a specific plant and to a specific problem of forecast accuracy within that plant.

Integrated supply chain performance management provides the complete graphical metrics view needed, as well as exception based presentation of information and detailed relationships of performance and the underlying causes of that performance through linked metrics.

(07:46)

Now, let's look at how supply chain performance management can fit into your existing application environment and what benefits you may expect to realize.

Customer Benefits

Customer service is dependent on connecting all elements of this supply chain to provide total visibility. Cognos Supply Chain Performance Management Solutions take information from any of your current transactional systems as well as information from your suppliers and logistics providers and provides an integrated foundation to answer the questions that drive performance.

Effective supply chain performance management delivers dramatic results. Our customers experience improved visibility across the entire supply chain. Balanced metrics and integrated business intelligence provides reporting on all key supply chain functions. Exception based information is provided so that managers can take action before supply chain disruptions occur.

Proactive visibility and analysis enable our customers to meet their delivery commitments. Additionally, processes that consistently cause disruption are identified and corrective actions can be implemented so that sustained improvement is realized over time. Significant cost reductions are achieved through reduced inventory, better resource utilization and reduced transportation and labor cost.

Finally, our customers achieve greater value from their existing applications. Cognos Solutions seamlessly access transactional data from these applications and build a performance management environment.

Data is collected from multiple systems in order to provide a complete product, process and customer centric view of supply chain performance. The existing systems continue to address the transactional needs of the various departments while the Cognos Performance Management Solution provides the visibility and analysis necessary to drive better business decisions.

You can find out more by visiting the Cognos Manufacturing Resource Center on cognos.com. There you will find customer success stories, white papers and examples of supply chain performance management in action.

I hope you have found this discussion of supply chain management informative. On behalf of all of the professionals at Cognos, thank you for your time and we look forward to helping you achieve higher levels of performance in your supply chain.
[END OF SEGMENT]