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Beyond Supply Chain Visibility: Response Management is the Key

Supply chain visibility ranks as one of the top two application focus areas for companies as part of their supply chain technology investment plans. Supply chain executives view visibility as the main goal for supply chain executives within supply chain initiatives. The ability to respond to change rapidly is emerging as critical to a company's success. This is often driven by increasing demand volatility, shorter product lifecycles and globally distributed supply networks. Just having visibility is not enough to manage this constant change. This research brief outlines the key characteristics of solutions that go beyond visibility toward enabling a flexible Response Management capability.

Supply Chain Visibility: Why is it Needed?

Business processes at most companies are transforming from inward-focused processes to outward-facing actions that must harness knowledge and synchronize activities across suppliers, logistics providers, and customers. Some of the key business drivers that are forcing companies to focus on improving and extending supply chain visibility are:

- The rapid introduction of new products with short product life cycles (less than a year)
- Volatile market resulting in high uncertainty in demand
- Shrinking margins due to price pressure
- Rising customer service expectations and diminishing brand loyalty
- Increasing global competition
- Business pressures to utilize expensive assets with maximum efficiency
- Global proliferation of value chain partners

These changes are resulting in significant challenges in the marketplace. For example:

- 50% of consumer industry companies report that it takes over a month to sense changes in demand. 80% of companies report lost sales due to a lack of market sensing and response capabilities.
- Best in Class automotive OEMs show as 1.5 times more likely to focus on how to react more quickly to changes in demand and to reduce order to delivery lead times than their peers.

Recommendations for Action

1. Extend supply chain visibility

Move to exception-based management of supply chain activities and slowly increase the number of milestones you monitor.

2. Apply analytics to allow Response Management

Start using visibility data for more than just improving ad hoc expediting and re-routing decisions. Empower people with tools to make faster and better decisions. Move to detailed performance score carding and root cause analysis.

3. Invest in people

Refine your ability to deliver "just in time" information to users across the enterprise. It is essential to arm these people with the right tools to drive rapid action in response to unexpected events.

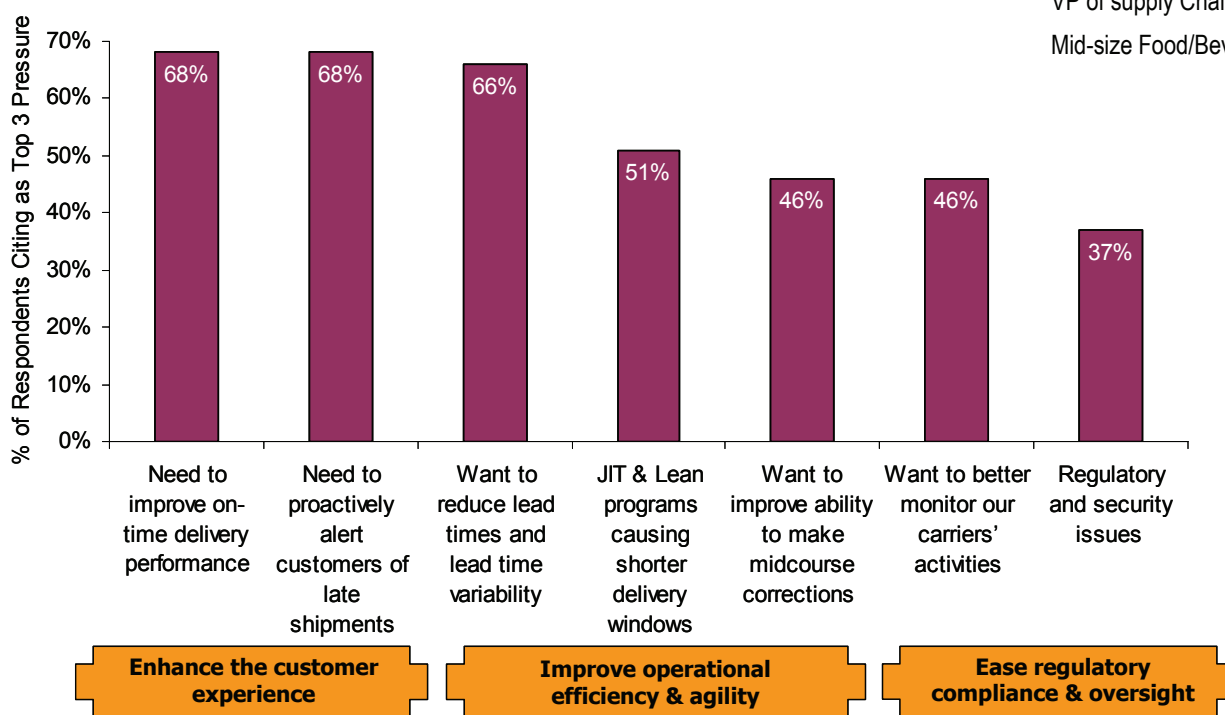
Aberdeen Group research shows a new focus on externally focused supply chain processes, with improved supply chain visibility being the top priority. The good news is that companies can learn from the missteps and success stories of early adopters to create a lower-risk, higher-reward supply chain initiative. Companies report as foremost concerned with improving customer satisfaction and reducing cycle times and lead time variability to lower inventory and operational costs (Figure 1). Improved operational efficiency and agility is a very important consideration for companies to focus on supply chain visibility. This supports the fact that companies are looking beyond visibility towards agility – namely the ability to respond to change.

Enterprise Quote

“In our competitive environment, supply chain assets must be used as productively as possible. We do see unpredictable events that disrupt a cost-effective plan and solving these unforeseen problems often increases costs and lowers productivity.”

VP of supply Chain
Mid-size Food/Beverage Company

Figure 1: Top Pressures for Improving Supply Chain Visibility

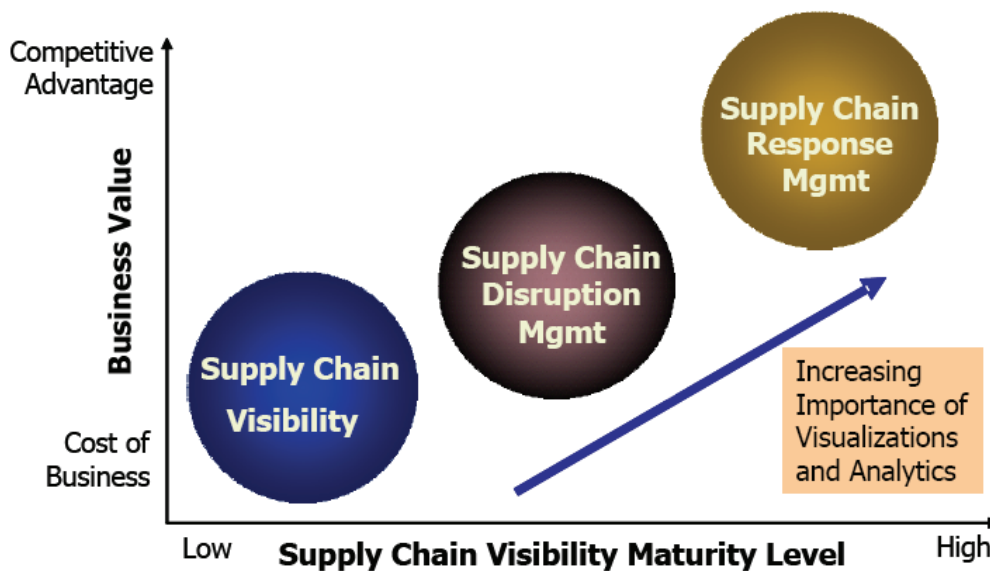


Source: Aberdeen Group, July 2007

Maturity Levels Within Supply Chain Visibility

Companies seeking operational improvement and financial value from visibility technology are moving from pure visibility to supply chain disruption management as well as supply chain Response Management (Figure 2).

Figure 2: Driving Increased Value from Visibility Technology



Source: Aberdeen Group, July 2007

- **Supply Chain Visibility:** Today, almost two-thirds of companies surveyed by Aberdeen deploy some sort of global supply chain visibility technology, though many of these tools provide basic “where is my order” status information and are often department based. These systems are unable to model demand fluctuations and the impact that these have on the production schedules and the ability of the company to meet the demand in a profitable manner.
- **Supply Chain Disruption Management:** Disruption management adds the ability to alert users proactively if production events and demand spike events are deviating from planned milestones (e.g., if on-time delivery falters, supplier capacity is lower than expected, unexpected material shortages arise, etc.) Disruption management further provides escalation workflow and assists in problem resolution. *Effective disruption management improves on-time delivery performance, lowers expediting costs, and reduces expediting costs.*
- **Supply Chain Response Management:** The greatest financial value comes from leveraging visibility information to identify and eliminate root causes of delays and to rapidly respond to changes that could negatively impact the business if mismanaged or left unattended. All of this hinges on the ability to rapidly analyze data to understand its impact, collaborate and simulate to understand what options exist to solve a given problem and to score each option to ensure that actions are aligned with corporate objectives. *Effective*

supply chain Response Management reduces lead times and variability, enables lower inventory investment, improves customer satisfaction and revenue attainment and cuts supply chain costs.

Response Management as a Key Enabler for Supply Chain Improvement

Response Management is a different solution than Advanced Planning (APS), ERP and Business Intelligence solutions, providing unique sense and respond capabilities that are not available currently to enterprises.

The following key characteristics are pre-requisites for a Response Management system:

- **Speed** – Response Management analytics operate in real-time, allowing for rapid insight into the impact of a given change or proposed response to change. Companies that net demand and supply more frequently (going to weekly and even on demand from monthly or quarterly) are 2 times more likely to have working capital reductions than All Others. In addition Best in Class companies are twice as likely to have incorporated alert management and event management capabilities that require human decision support in addition to advanced planning capabilities.
- **Transparency** - Companies using visibility technology within the context of Response Management are three times as likely to have faster order to delivery cycles
- **Risk management** – The top rated method to reduce supply chain risk is to increase supply chain flexibility to allow companies to balance risk and opportunity.

The key capabilities of Response Management solutions that support the above are:

- **Data integration** – the ability to extract data from and return data to existing ERP, APS and other systems rapidly.
- **Execution** – the ability to not simply simulate but execute on business decisions such as what capacity and materials to peg to an urgent sales opportunity
- **Usability** – existing APS systems are designed as black box solutions without a large amount of user interactions. Seventy-four percent (74%) of companies report using spreadsheets in some form or fashion during their supply chain processes. A Response Management solution must have the usability of spreadsheets while avoiding the lack of data integrity that spreadsheets possess. Such solutions also need to foster collaboration and come with embedded analytics specific to the supply chain problems they address.
- **Business analytics and simulation** – ability to make tradeoff decisions based on different criteria such as working capital, capacity, inventory safety stock levels.

- Empowered people - Response Management process is a distributed process where people collaborate and use human judgment to quickly come up with the right course corrections to make in light of unexpected events

Case Study

Casio Computer Co. Ltd., is a global consumer electronics company which manufactures electronic calculators, timepieces, musical instruments, LCD TVs, pagers and other communications devices.

The Challenge

Casio faced the challenge of very short product life-cycles and the pressure to continually deliver cutting-edge products to meet demanding customer needs. They also felt the pressure to reduce supplier lead-times so that new products get to market faster.

The Solution

A Response Management solution was implemented in order to address the above issues. The key characteristics of this solution were:

- Rapid Order sourcing: It takes a unique combination of information and business rules to determine where an order should be sourced and the appropriate delivery and build schedules for all steps in the supply chain.
- Closed loop with ERP: Provides closed-loop integration with their ERP system to ensure complete automation and rapid response.
- Flexible solution to change the business rules as the business itself evolves

Benefits Gained

The solution allowed Casio to collaborate and respond rapidly to any changes in supply and demand. Calculations that had previously taken 3 hours to run can now be completed in less than 50 seconds. The solution has enabled Casio to improve daily operations efficiency in materials, logistics and manufacturing operations.

Recommendations for Action

1. Extend supply chain visibility.

Transition to exception-based management of supply chain activities while slowly increasing the number of milestones you monitor, such as on-time delivery, material shortages, etc. Begin by executing against a longer-term roadmap that adds escalation policies, capacity issues, inventory pipeline visibility, and demand variability.

2. Apply analytics to allow Response Management

Start using visibility data for more than simply improving ad hoc expediting and re-routing decisions. Transition to detailed performance scorecarding

Enterprise Quote

“With the Response Management solution materials, logistics and manufacturing operations efficiency is increased and information sharing is dramatically improved”

General Manager, Information
Technology Department
Casio Computer Co. Ltd

and root cause analysis. Mine the data to investigate recurring bottlenecks, supplier performance issues, capacity utilization and material management, etc. As the amount of data increases, the speed of mapping and visualizations combined with data analytics will become increasingly valuable to identifying problem areas and improvement opportunities.

3. Invest in people for performing Response Management

Refine your ability to deliver “just in time” information to users across the enterprise. Roll out rich “cockpit” displays that enable real-time supply chain monitoring and support drill-downs into problem areas. Create role-based views that incorporate key performance indicators to provide true supply chain process visibility to executives, supply chain managers, warehouse directors, purchasing departments, sales and marketing organizations, customer service agents, inventory managers, and finance. It is essential to arm these people with the right tools to drive rapid action in response to unexpected events.

For more information on this or other research topics, please visit www.aberdeen.com or contact: nari.viswanathan@aberdeen.com

Related Research

[*Supply Chain Cost-Cutting Strategies: How Top Process Industry Performers Take Radically Different Actions*](#); March 2007

[*Demand Management in Consumer Industries*](#); December 2006

[*The Supply Chain Visibility Roadmap*](#); November 2006

[*Globalization: The Turning Point for Packaged Supply Chain Software in Automotive, Aerospace and Defense Industries*](#) (January 2007)

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