

Visibility in the Import Supply Chain

Getting a Clear View into Competitive Advantage

Executive Summary

Leading importers are reaping the benefits of end-to-end global supply chain visibility and control. They are gaining competitive advantage over their rivals, by:

- Operating with less overhead and inventory
- Reacting to fluctuations in demand or disruptions to the supply chain more quickly
- Managing risk more effectively

A new generation of on-demand, Web-based supply-chain management technology gives them the edge. This technology connects shippers, suppliers, and logistics partners through a Web-based, centralized data network, making end-to-end global supply chain visibility a reality.

Companies with these capabilities are putting themselves in a different league than their less tech-savvy competitors. Visibility technology offers more than just track and trace. These systems enable fundamental, strategic improvements in operations, with bottom-line impact:

- Improved supplier collaboration
- Increased global supply chain agility and reliability
- Reduced transportation spend
- Enhanced compliance with regulations and customs requirements
- Shortened product lead-time and lowered inventory carrying costs
- Augmented transparency into actual landed costs as they are incurred

Those who use today's Web-based visibility platforms to address high-impact supply chain improvement opportunities see their costs go down and performance go up. They also achieve improvements in agility and responsiveness that translate into greater profitability, lower risk, and better customer service across the board.

This paper describes why visibility is so important, how Web-based supply chain visibility systems work and why they are so critical for success in the inter-company world of global trade. Using concrete examples from the field, this document will focus on specific areas of the import operation and show how a clear view of the end-to-end supply chain can deliver unprecedented value to the bottom line.

Strategic operating improvements through visibility

Some importers are already reaping the benefits of end-to-end global supply chain visibility and control. They operate with less overhead and inventory, they react to fluctuations in demand or disruptions to the supply chain more quickly and they manage risk more effectively.

On the other hand, companies with limited visibility into their global supply chain operations are quickly realizing they need help. The manual processes that worked well enough in the past (faxes, phone calls, express mail) are impossible to manage efficiently across supply chains that now span multiple continents, time zones, partners, currencies and languages.

To deal with the exponential increase in complexity of global supply chains, importers need technology that can provide visibility into the web of connections between trading partners.

The ability to see the status of orders, shipments, goods in transit, trade documents, and costs as inventory traverses the global supply chain enables companies to transform key business processes and drive significant and enduring value.

These business process changes lead to fundamental, strategic improvements in operations with a direct impact on the bottom line. Top importers are using these capabilities to put themselves in a different league than their less tech-savvy competitors.

Each company must analyze its own business processes in order to determine the kind of value it can unleash by committing to a reliable global supply chain visibility platform, but here are some common examples of specific process improvements importers are carrying out today:

1. Supplier collaboration

Visibility drives process efficiency and improves collaboration between buyers and suppliers. The activities of the supplier no longer take place out of sight, in a “black box.” Companies can see supply chain events as they occur, in sufficient detail to highlight and correct problems or deal with sudden changes in plans. Capabilities include:

- **PO distribution:** Suppliers can accept, decline, or request changes to orders instantaneously. Buyers/merchandise managers can benefit from being able to access all of their supplier responses in a central location.
- **Staying ahead of disruptions:** As the ordered goods are produced, deviations from planned production, delivery dates, and quantities can trigger alerts in the system, providing buyers with an early warning of potential delays down the line.

Aberdeen Group reports that companies with visibility into in-transit shipments, order and supplier events, and trade document status are:

- 66% more likely to be re-routing in-transit shipments to higher points of demand “sometimes” or “frequently”
- 74% more likely to cross-dock shipments “sometimes” or “frequently”
- 51% more likely to monitor logistics bottlenecks and adjust plans to avoid congestion “sometimes” or “frequently”
- 3.9 times more likely to be able to analyze their current level of supply chain risk exposure

Source: Aberdeen Group, September, 2008: “Beyond Visibility: Driving Supply Chain Responsiveness”

- **Product safety and quality:** The results of safety and quality inspections of products are rapidly and consistently made available to those who need them.
- **Document creation and management:** Suppliers can prepare shipments by creating key documents (such as commercial invoices and packing lists), using data directly downloaded from the purchase order to reduce data re-keying errors. They can also perform valued-added services such as labeling, creating special packaging, and generating ASNs.
- **Origin operations support:** With a “single version of the truth” about the specifics of a shipment and a single point of contact for all involved parties, there is far less room for consolidators and forwarders to make mistakes at the point of origin.

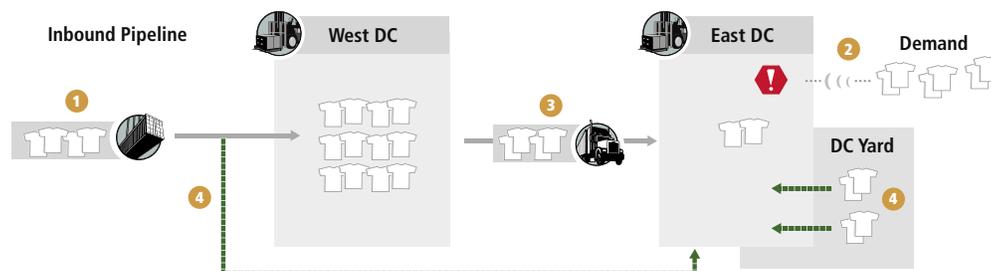
2. Improving supply chain agility and reducing inventory

Increased visibility and control over inventory across the extended supply chain create a “virtual warehouse” where importers can see the entire inventory they own at any given time or place — even when that inventory is outside the four walls of the enterprise.

This virtual warehouse gives importers the power to make strategic fulfillment decisions, dynamically repositioning or re-routing inventory as needed, based on a better understanding of where goods actually are *right now*.

Visibility platforms help importers proactively monitor and minimize delays caused by missed deadlines along the supply chain. They calculate dynamic ETAs to highlight potential problems before they arise. Importers can then dynamically alter replenishment plans by adjusting allocations or diverting in-transit inventory to respond to changing availability or customer demand (see Figure 1).

FIGURE 1: With better management of inbound replenishments, importers can reduce maverick transportation spend on unnecessary expediting or inventory transfers between regional distribution centers

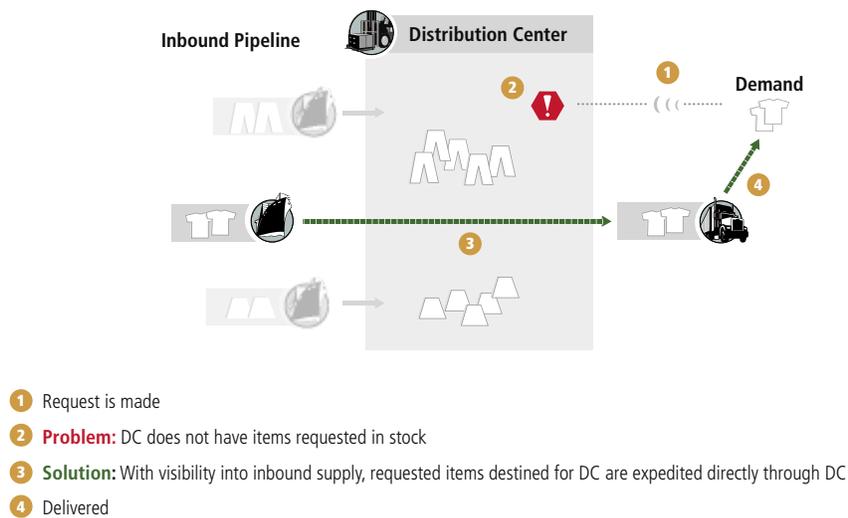


- 1 Based on early forecasts, a steady supply is planned to arrive in the DCs
- 2 **Problem:** Unexpected change in demand can't be met with existing inventory in East DC; no visibility into yard, where there may be inventory, or into ETAs of inventory en route, which could be just days away
- 3 An Out-of-Market transfer is initiated; inventory is trucked across the country to replenish the East DC, incurring additional handling and transport costs
- 4 **Solution:** With visibility into yard inventory and the inbound pipeline, yard inventory could be used, and container shipments destined for the West DC could be diverted en route to the East DC, avoiding an Out-of-Market transfer

At the receiving end, the system can streamline transfers of cargo from one mode of transport to another, which is often a major bottleneck. Other benefits include:

- Reducing container detention charges and improving yard turnover
- Improving efficiency of DC cross-docking operations and streamlining the receiving process (see Figure 2). One leading importer increased cross-docking by over 400%, achieving both inventory cost savings and improved customer service
- Improving receiving labor and DC space requirements forecasts
- Performing post-entry audit to spot shortages/overages for customs filing within 10 days

FIGURE 2: Cutting costs and back-order time through increased cross-docking



Perhaps the largest opportunity to drive value is the reduction in buffer inventory made possible by increased visibility and predictability of supply.

Finally, data and insights provided by the platform give companies the tools and materials for the strategic analysis needed to drive transformative ongoing process improvements.

3. Reducing transportation spend

Access to detailed, reliable historical cost and usage data allows negotiations for transportation contracts to be conducted on the basis of a much clearer understanding of real needs and past deals — and increases the likelihood those contracts will meet current requirements.

Sophisticated optimization technology can maximize the value received from freight allocation decisions — value determined not only by cost, but also by service levels and other important considerations.

Automating the audit process can eliminate freight overcharges. This capability can be an important tool in achieving Sarbanes-Oxley compliance, too.

Improved visibility also reduces the need for premium freight services such as expedited shipping. For many importers, this reduction represents a significant source of value.¹

¹ For a detailed discussion of this issue, please see the GT Nexus white paper, “Can JIT and Global Sourcing Strategies Co-exist?”

4. Meeting regulatory compliance requirements and streamlining import Customs processes

A Web-based visibility platform provides the connectivity, the data, and the data-handling capabilities importers need to reduce compliance risks, to avoid overpaying duty, and to expedite the clearance process.

The platform already contains the data needed to improve Customs entry workload planning and to ensure timely filing. The system can be used to create digitized documents and service providers or other trading partners can upload document images or files to the system. The platform can automate both pre-entry validation (comparing HTS codes from the PO with those on the item master) and post-entry validation (HTS, Value of Goods, and Country of Origin).

The platform also provides a base from which companies can quickly comply with regulatory changes, whether they are minor tweaks or major new rules.

5. Tracking actual landed costs as they build

In an extended global supply chain, unexpected costs can damage margins, sometimes wiping them out altogether. Controlling overall cost escalation and accurately understanding landed costs — the total cost to purchase an item from an overseas supplier and get it to market — is critical in protecting profits.

Most importers have a predictive approach to calculating landed costs (see Figure 3). In contrast, the visibility platform captures actual costs as they are incurred, so importers are able to compare actual costs, in real time, with previously set targets.

Early visibility into the difference between target and actual costs allows importers to modify plans for downstream product pricing and marketing campaigns while there is still time. They can also identify chronic problem areas.

The integrated global cost control system also supports key processes that underpin accurate total cost management. These include:

- **Cost allocation:** Costs can be automatically allocated by the system in the proper proportion to the right shipment, order, product line item or SKU.
- **Cost audit:** Costs can be automatically audited in the system. Freight costs can be matched against transportation contracts, duties against item classifications, and first costs against commercial invoices or original purchase orders.
- **Cost timing:** The time in which a certain liability was incurred can be audited or matched by the system against a corresponding event in the physical supply chain. For example, transfer of title to goods (and resulting payment) can be associated with or triggered by related events in the “physical” supply chain, such as Forwarder Cargo Receipt, Vessel On-Board or Vessel Arrival.

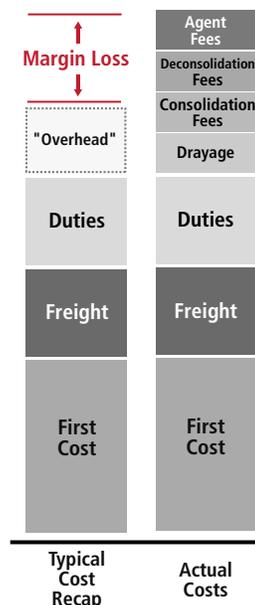


FIGURE 3 Traditional approaches to determining landed cost often uncover “surprise” costs too late to make corrective adjustments.

The benefits of visibility are clear, but how are they to be achieved? The process described above are complex and involve multiple recipients both within and without the four walls of the enterprise. Thus, companies need both access to internally- and externally-generated data and systems that can turn that data into useful information.

On-demand — The right technology model

The good news is that companies no longer need to spend a small fortune and wait years to build or install complex software systems in order to get these capabilities. On-demand technology delivery quickly makes these capabilities available via the Web, with a much smaller up-front investment of time and money than in the old purchase-and-install or in-house-development models.

“On-demand” is a new technology delivery mechanism that eliminates the need to build or buy expensive on-premise systems. On-demand supply chain management technology offers easy access to sophisticated supply chain management tools, as well as to the network of shippers, suppliers and logistics partners needed to make end-to-end supply chain visibility a reality.

The leading providers of supply chain visibility combine software applications and partner integration hubs on a unified, “on-demand” portal. A centralized, shared hub collects and standardizes all the data from a widely-dispersed community of supply chain partners, which gets every participant on the same wavelength and ensures information from one system is comprehensible to all the others. This approach reduces the time, risk, costs, and headaches of traditional software deployments.

The on-demand delivery model allows customers to connect to the network quickly and easily and then to focus on automating specific business processes, one at a time. Once the value of the solution is confirmed, they can automate additional business processes, in stages, as they wish.

Conclusion

For years, supply chain managers have had to make do with a best-guess of what is in the pipeline and have suffered the consequences of uncertainty in the form of excess costs and degraded customer service.

Today, top importers are changing that. They are harnessing the newest visibility technology to drive unprecedented levels of efficiency. Organizations that have harnessed technology to drive broader supply chain visibility across their own internal operations and beyond to their external trading and logistics partners have unleashed significant value.

The technology behind these initiatives is new. The development of a universally-available Internet infrastructure makes it possible to connect a widely-dispersed, rapidly-changing community of business partners quickly and cost-effectively. These participants in complex, international supply chains can exchange crucial, timely data, improving operational efficiency for everyone as never before.

The on-demand model of Web-based applications built on a robust data network gives importers the real possibility of 100% inventory visibility, with major implications for creating and maintaining competitive advantage. This new world of network-based supply chain management enables importers to maximize efficiency, to minimize costs and waste, and to improve strategic decision-making. These are material improvements with concrete, bottom-line benefits.

Companies with a Web-based visibility platform have a critical competitive advantage. These leaders have used technology to make changes that drive costs down and performance up, transforming them into agile, responsive organizations that run consistently ahead of the pack.

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