supply chain Insight

Best Practices in International Logistics

How Top Companies Use Technology and Logistics Partners to Improve Performance

Business Value Research Series

AberdeenGroup Manhattan Associates

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Executive Summary

Business success is increasingly linked to effectively managing international logistics. Growing low-cost country sourcing and rising sales to international customers are triggering companies to seek new ways to manage the costs, complexities, and uncertainties of moving goods across borders.

In November and December 2005, Aberdeen researched companies that are transforming their international logistics operations to find out how they are achieving improvements. Eight companies were selected as best practice winners, two in each logistics management category: global inventory control, transportation spend management, import/export process management, and international logistics outsourcing. These companies are able to invest less capital in international logistics yet provide better service to customers.

Key Findings and Recommendations

Analysis of the best practice winners found that greater process automation, improved technologies, and increased reliance on logistics partners were instrumental in driving their successes. Although winners focused on different areas of international logistics improvement, they shared common views on how to achieve success. Companies seeking to improve their international logistics performance should consider these best practice tenets as they construct their transformation roadmap.

- Envision the future, act on the foundation. Best practice winners set the strategy for international logistics in the context of how their companies compete as businesses. However, they realize logistics excellence is a journey. As a result, they focus their actions on transforming specific, foundational components on which they can drive future improvements. Visibility, trade compliance, and transportation contract management are some of the most common cornerstones.
- Partner for success. Unlike in domestic logistics, it's impossible to "go it alone" in the international arena. To drive their success, best practice winners are creating better ways to leverage the skills (and technology) of partners. They are figuring out new ways to synchronize activities and increase process visibility and control with customs brokers, freight forwarders, ocean carriers, logistics service providers, and others. Best practice winners stress that it is vital to choose partners that provide the best value, not the lowest contract cost.
- Automate with Internet-based technology. Without exception, best practice winners' logistics strategies revolve around decreasing manual processes and increasing automation. Internet-based technology is enabling a new level of transaction automation and partner synchronization previously not practical or possible. On-demand global trade management platforms and data gateways are driving more electronic collaboration for significantly reduced IT costs.
- Create visibility to create control. International logistics is all about managing a network of third-party providers. The foundation for controlling this process is visibility. For a number of best practice winners, visibility does not stop at identifying a shipment delay or inventory issue. Rather, an alert is the first step in a structured notification, resolution, and root cause analysis process. In particular, those companies with strong Six Sigma heritage are using that discipline to create improved international logistics reliability.
- Use inventory more effectively. A number of international logistics leaders are focusing on extracting more value from their inventory. In some cases, this means creating better in-transit visibility so they can redirect inventory around port congestion or other bottlenecks or to higher points of demand. In other instances, the focus is on optimizing where and how much inventory to hold in the first place. Better leveraging the networks of logistics partners and using multi-echelon inventory optimization tools are some of the success tactics being applied.
- Implement transportation spend management. Although companies have focused on spend management discipline in areas like office suppliers, travel expenses, and telecom costs, they have mostly ignored ocean and air freight costs. Two of the best practice winners focused specifically on aspects of transportation spend management to jump-start their improvement initiatives.
- Streamline customs processes and maximize trade agreements. Without a solid foundation of trade compliance and documentation, purchasing will make the wrong sourcing decisions, goods will be delayed clearing customs, and the business will be put at risk of regulatory infractions. Trade agreement management and integration with broker partners to avoid data keying errors and costs are among the key trade compliance initiatives for best practice winners.
- Obsess about organizational buy-in. Best practice winners are intensely focused on gaining and maintaining organizational buy-in for their logistics transformation initiatives. This includes gaining the CFO and finance organization's support by focusing not just on logistics-related savings but also translating the initiatives to tangible, direct benefits for them.

Key Takeaways

- Internet-based technology is instrumental to better performance.
- Outsourcing to logistics service providers can drive leaps in performance when paired with visibility and control technology.
- Spend management in international logistics is an emerging area of focus.
- Creating organizational buy-in is the most important factor for success.

The heat is turning up on logistics processes as sourcing and manufacturing activities are increasingly being done internationally. Companies going global are experiencing unexpected transportation costs, higher inventory investment, and longer and more unpredictable cycle times, while at the same time their local customers are demanding lower prices, more unique execution, and improved responsiveness. As a result, companies are seeking ways to make their international logistics processes more reliable, more flexible, and less expensive.

Aberdeen surveyed and interviewed more than 400 international logistics and trade managers in 2005 to find out how companies are coping. In November and December 2005, Aberdeen researched companies that are transforming their international logistics operations to find out the details of how they are achieving improvements. Out of this research, eight companies were selected as best practice winners, two in each logistics management category: global inventory control, transportation spend management, import/export process management, and international logistics outsourcing.

The Challenges of International Logistics

In most companies, international logistics processes mirror domestic supply chain practices in the 1970s: logistics staffs keep their supply chains moving through experience-based problem solving, and insistent phoning and faxing of logistics partners. At nearly two-thirds of companies, spreadsheets, department-built Access database applications, and emails round out the technology portfolio.

Many international logistics groups have reached the breaking point, however. As global sourcing and selling increases, so do transactions, partners, and problems to be managed. But budgets don't allow logistics departments to continue throwing people at these issues. The current manual-intensive process of global logistics is becoming unsustainable. Companies adopting automation are starting to experience cost and speed advantages over their competitors. These companies are using automation to tackle both physical distribution challenges and cost control challenges.

Physical Distribution Challenges

Companies are seeking to improve international logistics processes because of longer lead times, greater supply chain uncertainty, and increased business risk (Figure 1). The greatest handicap to logistics performance, according to two-thirds of firms, is the lack of visibility and metrics for managing overseas vendors and logistics service providers. (See *New Strategies for Global Trade Management*, March 2005.)

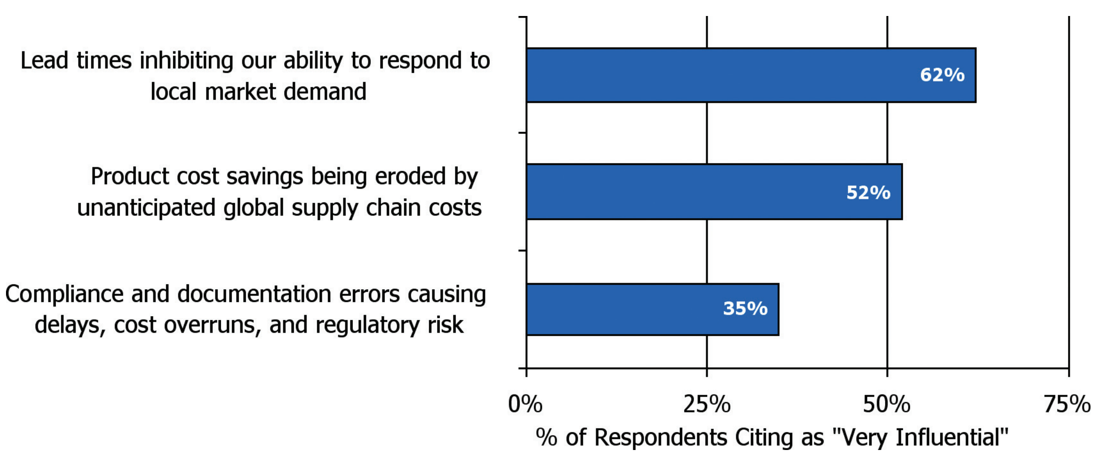

Figure 1: Top Pressures Driving Companies to Improve International Logistics
Source Aberdeen*Group*, January 2006

Cost Challenges

A parallel issue is cost control. "In our domestic supply chain, we can easily attribute freight costs and even understand the impact of truck fuel surcharges at a carton level," says a retail international transportation director. "But on the international side, we were challenged to answer even basic questions such as, "What's the average ocean freight spend per month, by lane?" Because we lacked integrated systems and normalized data."

Companies are finding that inadequate transportation spend visibility is leading to unanticipated budget discrepancies, unexpectedly low product margins, and, in some cases, higher rather than lower total costs when sourcing from low-cost countries. As Figure 2 shows, international transportation expense is the top area for budget discrepancies.

Learning from the Top Performers

Top performers are succeeding in using international logistics transformation to drive quantifiable business benefits for their corporations, including cost and speed advantages. These companies are able to invest less capital in international logistics yet provide better service to their customers. They are arming their logistics staffs with up-to-date technology and integration-friendly logistics partners to support today's global-intensive business environment.

Analysis of the eight best practice winners found that greater process automation, improved technologies, and increased reliance on logistics partners were instrumental in driving their successes. Although winners focused on different areas of international logistics improvement, they shared common views on how to achieve success. Companies seeking to improve their international logistics performance should consider these best practice tenets as they construct their transformation roadmap.

Envision the Future, Act on the Foundation

The strategy for international logistics has to be set in the context of how a company competes as a business. "We have a highly leveraged business model based on product leadership," says the senior vice president of operations for a mid-size high-tech winner. "We needed a logistics strategy that supported our corporate strategy. For us, this meant outsourcing logistics to a domain expert and creating an international distribution network that was simple, visible, and accountable."

The logistics strategy must envision the future but action needs to be taken on the discrete, foundational components. These elements include such areas as ocean contract management, trade compliance, and visibility. For instance, automating the trade compliance process lays the groundwork for better total landed costing and margin management, smarter sourcing and inventory management decisions, and fewer supply chain delays. Best practice winners seek rapid time to benefit on their logistics transformation projects, often achieving payback on their initiatives in less than a year.

The other aspect of a sound international logistics strategy is that it needs to be built for flexibility. "Expect and prepare a foundation for change," says the vice president

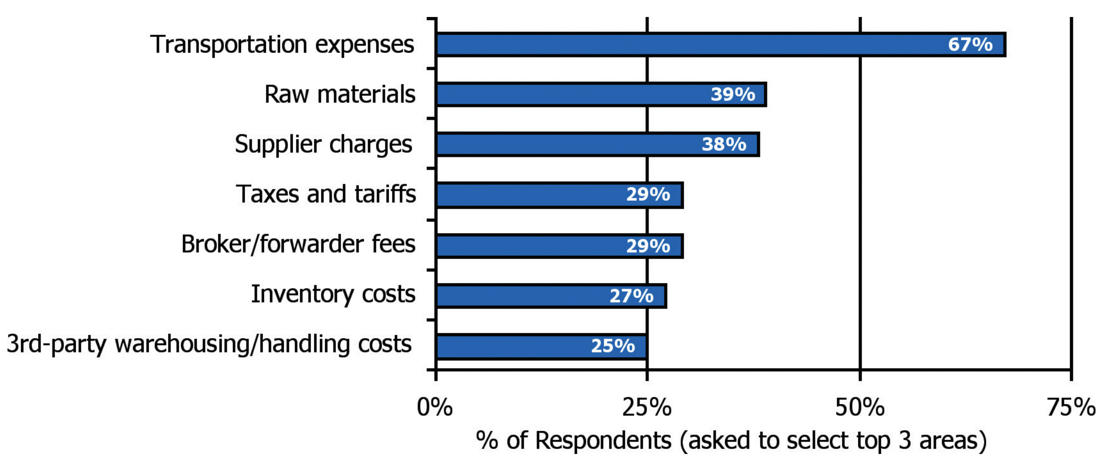

Figure 2: Top Areas for Global Trade Budget Discrepancies
Source Aberdeen*Group*, January 2006

of global logistics for an apparel company. "C-TPAT, advanced manifest requirements, changing trade agreements and free trade zones, new partners and events to track, new distribution bottlenecks to avoid—change is constant."

"Our next core competency," says an appliance manufacturer's global value chain leader, "is focusing on the speed and velocity in which we can execute the results of new logistics strategies." Being able to flex the international supply chain quickly to avoid cost and service issues and take advantage of new productivity advances requires technology and partners built for change.

Key areas to address in building an international logistics strategy are shown in Figure 3.

Partner for Success

Unlike domestic logistics, it's impossible to "go it alone" in the international arena. Best practice winners are figuring out new ways to synchronize activities and increase visibility and control of processes with customs brokers, freight forwarders, ocean carriers, logistics service providers, and others. These companies are leveraging the skills (and technology) of partners to achieve cost and lead time benefits. "Rather than displace our brokers, we want to automate our interactions," says a logistics manager. "The manual process of interacting with them results in high document fees and additional errors because they are re-keying data. We want to fix that, not take over their activities."

Two of the best practice winners embraced total logistics outsourcing. "Don't do outsourcing for the sake of outsourcing," says an executive of one of the winners. "Your strategy needs to take into account the complexity of your products and business model or it will fail." For this company, logistics outsourcing was the right strategy and resulted in a 30% decrease in logistics costs.

"If you do outsource, never go with the lowest contract cost," continues the executive. "Go with the best value proposition."

"If outsourcing is right for you, move immediately to a single end-to-end logistics provider that can provide you with flexibility, reliability, and visibility," urges another logistics executive. "But make sure you're diligent in your evaluation to pick the right partner and consider not just cost but also quality and communications capabilities."

Automate with Internet-Based Technology

Without exception, best practice winners' logistics strategies revolve around decreasing manual processes and increasing automation. "Automation translates into speed," says one best practice winner. "Manual processes translate into delays and errors." According to another winner, "Having technology that lets you manage by exception is instrumental to boosting efficiency."

Internet-based technology is enabling a new level of transaction automation and partner synchronization previously not practical or possible. On-demand global trade management platforms and data gateways are driving

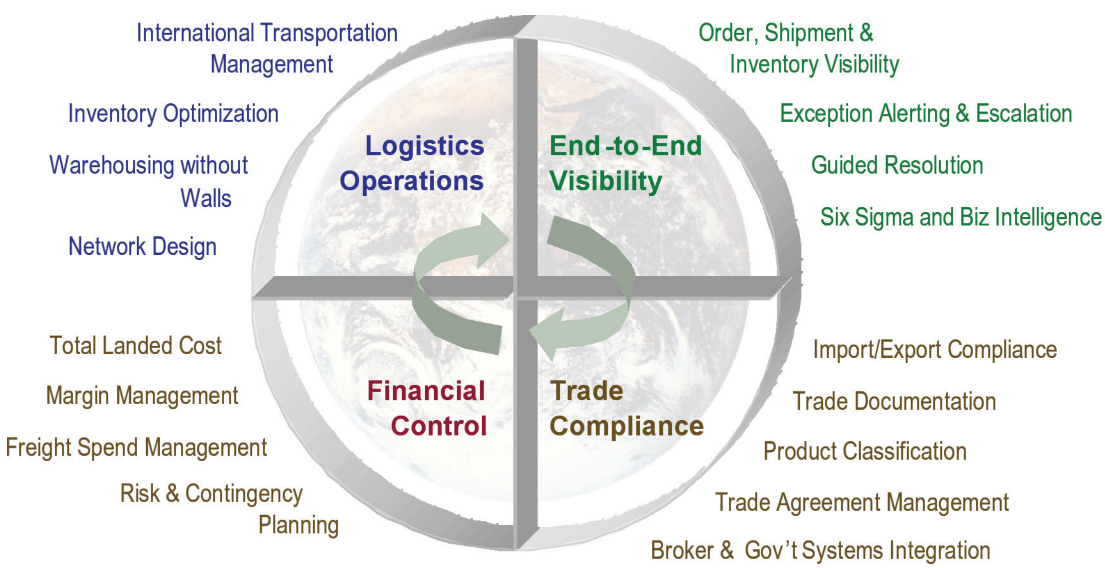

Figure 3: International Logistics Framework
Source Aberdeen*Group*, January 2006

more electronic collaboration for significantly reduced IT costs. Best practice winners report very little internal resistance to using on-demand technology, also known as "software as a service" or "hosted, web-based" systems. International logistics has historically been on the bottom of the corporate IT priority list, so CIOs are generally supportive of trying on-demand models in this area rather than having to reprioritize their projects and reallocate staff for traditional software installations.

Supplementing existing enterprise systems with advanced optimization is another favored strategy of best practice winners. They realize that optimizing end-to-end inventory or optimizing lane-by-lane awards to carriers or forwarders is too complex to figure out on spreadsheets. Multi-echelon inventory optimization and ocean bid optimization are two areas driving quick, multi-million dollar savings for companies.

Lay the Foundation for Visibility and Control

International logistics is all about managing a network of third-party providers. The foundation for controlling this process is visibility. Some of the best practice winners have integrated their enterprise customer service and logistics systems with the visibility systems of their logistics providers to obtain automatic status and alert information.

Other winners are using on-demand visibility solutions that are independent of their logistics providers' technology. This provides more control of how the technology can be used and also enables easier plug-and-play of logistics providers because technology does not have to be reinstalled when switching providers.

Companies that still rely on phone calls, emails, or manual web lookups to track down shipments are at a competitive disadvantage. Real-time knowledge of the location of goods throughout the supply chain makes for faster-moving inventory speeds, cash flow, and receivables, all while reducing inventory carrying costs. For a number of best practice winners, visibility does not stop at identifying a shipment delay or inventory issue. Rather, an alert is the first step in a structured notification, resolution, and root cause analysis process. In particular, those companies with strong Six Sigma heritage are using that discipline to create improved international logistics reliability.

Use Inventory More Effectively

Best practice winners also focus on extracting more value from their inventory. In some cases, this means creating better in-transit visibility so they can redirect inventory around port congestion or other bottlenecks or to higher points of demand. In other instances, the focus is on optimizing where and how much to hold inventory in the first place.

Aberdeen research shows that traditional inventory target setting practices are insufficient for situations where there is varying demand and supply uncertainty, often resulting in a company holding 20-30% too much inventory across its supply chain. Many companies use weeks of supply and rules of thumb based on past history to set raw material and work-in-process (WIP) inventory buffers. Whenever the supply base has poor performance, inventory planners ratchet up the inventory targets—but they rarely ratchet them down to account for better performance. So over time, companies can find themselves holding more and more of this just-in-case inventory.

By using multi-echelon inventory optimization, which more accurately accounts for supply and demand variability, companies can take out redundant and unnecessary inventory while improving customer service levels. (For more information on multi-echelon inventory optimization approaches and vendors, see *Are Your Inventory Management Practices Outdated?*, March 2005.)

Implement Transportation Spend Management

A missing discipline in many companies is transportation spend management. Although companies have focused on spend management in areas like office suppliers, travel expenses, and telecom costs, they have mostly ignored ocean and air freight costs. Yet international transportation costs can be two to three times higher than domestic costs and much more variable. Two of the best practice winners focused specifically on aspects of freight spend management to jump-start their improvement initiatives. "Electronic contract management is the foundation for spend management," explains an international transportation director. "We can exploit this foundation to improve product costing and margin management, automate freight audit processes, and take preemptive action on cost and allocation issues."

Streamline Customs Processes and Maximize Trade Agreements

Another foundational focus for best practice winners is trade compliance and documentation, which drives streamlined, cost-efficient, and low-risk international logistics processes. Best practice companies that focus on trade compliance excellence are realizing improvements in a number of areas:

- Automating import/export compliance and documentation processes;
- Maximizing free trade agreement program benefits and automating certificate of origin management with suppliers;
- Creating paperless workflows with brokers to lower document costs and increase classification consistency.

(For more information, see *The New Buying Guide for Trade Compliance Technology*, December 2005.)

Obsess about Organizational Buy-In

Universally, the eight best practice winners are intensely focused on gaining and maintaining organizational buy-in for their logistics transformation initiatives. "Communicate and educate everyone on the costs, risks, and benefits involved—make them aware of how it personally affects them," advises a global logistics manager. "Start with a small, manageable piece, gain success, and build on it."

In addition to the usual executive support needed for corporate initiatives, international logistics initiatives need to focus on securing:

- Local operational support. Involve subject matter experts and local logistics, manufacturing, and purchasing managers early and often. Early, collaborative review of workflow, data feeds, and optimization models is vital to creating buy-in and realizing the savings of new logistics strategies. Focus on changing the culture from a "We've always done it this way" mentality to an innovation mentality where operations staff actively thinks of how to create better ways to do business. Intimately involving the operations staff in the transformation project is the most effective way to foster an innovation mentality.
- Vendor and logistics provider support. Similarly, engage vendors and logistics providers as early as possible in the process. Look for ways to leverage their expertise while laying the groundwork for paperless transactions.
- Finance organization support. CFOs and finance organizations increasingly realize the value of enhanced international logistics automation and visibility. Key to gaining their support is not just focusing on logistics-related savings but also translating the initiatives to tangible, direct benefits for them (e.g., improve margin management, enhance cash flow forward visibility, automate human-intensive freight audit and settlement processes, and decrease cash-to-cash cycles). (See *The CFO's Agenda for Global Trade Benchmark Report*, September 2005.)

"To succeed, you absolutely need your finance community and the functional groups in lockstop with you throughout the process," says one logistics manager. Other companies cite Lean and Six Sigma leadership and staff as being key centers of support for international logistics transformations.

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