Getting Global Sourcing Right
The Role of Improved Technology in Meeting the Challenges of Global Trade Management

SupplyChainDigest

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Blinco Systems
Getting Global Sourcing Right

Executive Summary

While emerging as a political hot button in a 2004 election year, the use global sourcing and offshore manufacturing will continue to increase, driven by fundamental economic forces. The world economy will unquestioningly become more integrated, as companies buy and sell commodities and goods across the globe.

The reality is that offshore manufacturing can significantly lower total supply chain costs, and in some cases even save corporations – and jobs – that would be lost if not for lower costs offshore options for some goods and components.

While many companies are currently using offshore sources, and many more are considering this option, the reality is that the potential gains of offshore production are often not maximized, and in some cases largely lost due to logistics and related overhead costs – or major supply chain disruptions. The theoretic savings from offshore production evaporate very quickly, for example, if the goods expected to support a weekend retail promotion do not arrive on time.

Global sourcing and logistics is much more complex than domestic sourcing – yet, few companies have invested in the type of process automation tools needed to build a world-class global sourcing operation. As a result, they typically suffer from a variety of problems, including sub-optimal sourcing decisions that do not consider true total landed costs, high overhead and administration costs for managing sourcing operations, quality issues, logistics uncertainty and high inventory levels as a result. Rapidly emerging security and regulatory requirements, driven by the threat of terrorism and Homeland Security regulations, will subject companies to higher overhead costs to manage compliance and the threat of fines, penalties, and negative publicity from regulatory omissions.

This report provides a framework for considering a comprehensive global trade management technology solution – one SupplyChainDigest believes will be essential to manage the complexities of global sourcing, take maximum advantage of the opportunities, and gain competitive advantage. Spanning such functional areas as Sourcing and Merchandising, PO Management, Logistics, Security and Regulatory Compliance, and Financial Management, such solutions can significantly improve management of global sourcing complexities, drive out supply chain costs, and improve supply chain effectiveness.
Introduction

Global trade is expanding at a record pace. More and more companies are looking to take advantage of the significant opportunities for cost savings and other supply chain efficiencies by tapping into international sources of supply for manufactured goods.

The increase in offshore production, of course, is being driven by the promise of dramatically lower costs. The significantly lower labor and overhead cost structures in many global geographies can substantially reduce per unit pricing in many product categories, even after logistics, tariffs and other costs associated with global sourcing are considered. Frequently, it is also possible to take advantage of short-term imbalances in supply and demand across the globe to negotiate even more favorable pricing.

Global sourcing has additional benefits. For example, by opening up new channels of supply, manufacturers gains additional sourcing options, increasing flexibility and often product availability.

While this issue is likely to be a political hot button for some time, the reality is that we are in a global economy, with the international movement of goods continuing to increase each year. Companies that fail to open their organizations up to the possibility of global sourcing are likely putting themselves at a competitive disadvantage.

But while the potential for significant savings is real, and being enjoyed by thousands of companies across many vertical industries, global sourcing presents unique challenges that often limit their effectiveness. The most prominent of these include:

- **Sourcing:**
  - More complex quotation process
  - Difficulty in accurately calculating total landed cost data for sourcing comparisons
  - Need to develop a global sourcing infrastructure
  - Challenging communication environment
  - Managing more diverse business practices

- **Logistics**
  - Longer lead times
  - More variable lead times
  - New sets of intermediaries (3PLs, freight forwarders, etc.)
  - Poor information visibility/flow
  - Complex document requirements
Financial/Regulatory

- Cash management - understanding total landed costs, including logistics, duties, tariffs, etc. and the effect on cash flow
- More rigid and complex settlement processes
- Complex and growing import regulatory requirements
- Emerging requirements related to homeland security

While the potential benefits of global sourcing are clear, too many companies fail to fully realize this value due to poor execution and the inability to manage these global sourcing challenges well. For manufacturers, distributors and retailers to maximize results from their global sourcing programs, they must adopt improved business processes and appropriate technology support to avoid seeing a substantial percentage of the per unit cost advantage from offshore production eaten away in overhead and logistics costs, or cause supply chain disruptions that impact both the top and bottom lines.

The Global Sourcing Challenge

Global sourcing involves a complex business process that requires considerably more physical touch points and information flows than domestic sourcing processes.

This complexity starts with the sourcing process itself. Companies beginning global sourcing for the first time often struggle just to find the appropriate vendors to consider for production. Once a group of candidate vendors is compiled, a variety of other factors lead to difficulty effectively executing the sourcing process. These include geographic distance, time and language differences, the unique business processes and customs of specific countries and companies, substantial differences in technology enablement, etc. All this means even basic steps like receiving quotes and samples can be substantially more difficult than internal or domestic sourcing. Ensuring that you receive sourced products in spec, at the total landed cost expected, on time, and in compliance with existing regulations, is an even greater challenge.

International logistics is also much more complex. Figure 1 illustrates a typical logistics flow for domestically sourced goods. While increasingly relying on technology to automate many of these transactions, the workflow is comparatively simple, and the total cycle time usually complete in 4-5 days. While there is some cost reconciliation required based on actual carrier charges for accessorial, etc., calculating expected and actual logistics costs for each shipment is a fairly straightforward exercise.
International logistics flows are substantially more complex, as illustrated in Figure 2. Consider the following:

- By many estimates, there can be as many as 25-30 hands-off points within a complex global move.
- Lead times are substantially longer (measured in weeks, unless expensive air freight is used) – total transit times of 21-35 days from Asia are common.
- There is substantially more documentation required (commercial invoices, customs paperwork, etc.).
- There are as many as 7 times the number of cost elements to consider, including duties, tariffs, freight forwarding costs, etc.
On top of sourcing and logistics complexity, companies must be increasingly concerned with security issues in the global sourcing process. The terror attacks of Sept. 11, 2001 and other international incidents have created new concerns about the threat of terrorism and the use of international cargo to smuggle materials, bioterror threats, and even people. This will require a new level of intelligent logistics software capable or higher levels of tracking and notification, including comprehensive audit trails, to reduce these security threats and enable regulatory compliance.

Most Companies Lack Adequate Technology Support

In the face of this growing importance and complexity of international trade, few companies today have deployed the necessary application support to manage and improve the international trade processes. Traditional ERP solutions have not typically well-addressed the global trade problem. Many companies have acquired or built internal systems that address pieces of the problem, but rarely possess a comprehensive level of capabilities and automation. There are relatively few commercial packages that are focused on this issues, and most attack some subset of the challenge (visibility, compliance management) but do
not provide the level of end-to-end capabilities required to drive out costs and gain competitive advantage.

The reality is that most international “trade” solutions have been primarily focused on logistics issues, and do not provide adequate support for the “trade” or sourcing steps of the process. Managing complex global purchase sourcing, from vendor qualification and selection to purchase order management, total landed cost calculation, and inbound logistics management, requires a comprehensive approach that well integrates both sourcing and logistics capabilities, as the two are closely intertwined.

Companies that have not implemented best practices in global trade management processes, supported by the appropriate level of application support, are likely to suffer from several performance problems, including:

- Excessive internal overhead to manage global trade processes, sometimes 3-4 times lowest competitors.
- Inconsistent and uncertain lead times, increasing the need for buffer inventories.
- Manufacturing or customer service/fulfillment problems due to lack of expected inventory.
- Lost sales and inventory obsolescence: especially true for retailers that miss planned promotions due to sourcing/delivery problems.
- Excessive logistics and expediting costs.
- Lack of quality information to make better/best sourcing and logistics decisions.

Improved technology is not a panacea for all global trade management problems. However, given the complexity of global trade, it would seem imperative that companies support these processes with a comprehensive, integrated global trade solution to achieve high levels of performance.

SupplyChainDigest believes a robust global trade solution should address interrelated five functional areas:

1. **Sourcing and Merchandising**
   Includes the process of defining product requirements and appropriate global vendors.

   - Item management: enhanced real-time visibility and support for import compliance, security compliance, and harmonized tariff rulings (HTS)
   - Budgeting: vendor capacity visibility, visa and quota management
   - Seasonal and promotional planning
   - Collaborative product design:
2. Purchase Order Management

The capability to create international purchase orders and manage the PO execution process.

- PO creation: the ability to download and enhance purchase orders from ERP/procurement systems to meet the terms and conditions of global sourcing, or to create the purchase order independently or through the integrated RFQ process
- PO acknowledgement: automated vendor acceptance/acknowledgement of POs
- Sampling: collaborative management of samples through multiple stages of approval
- Production monitoring: process monitoring to ensure production of purchase orders is executed according to the plan
- Total landed cost calculation: capability to ensure that all estimated costs related to a purchase order are accurate; estimated total landed cost should reflect real costs associated with purchasing and importing the item.
- Delivery planning: monitoring and analysis to ensure that shipments can meet the requirements of the manufacturing or distribution plans.

3. Logistics Management

Management and control of the international transportation and logistics processes, and communication with third-party logistics providers.

- Shipment planning and booking: capability to book international transportation and ensure on-time receiving at point of destination.
- End-to-end visibility: visibility into movement of goods by SKU, PO, and container as it moves from offshore to into the company plant of distribution center; better, total visibility of all inventory across the entire supply chain and the flexibility to move inventory to where it is needed to meet demand.
- Carrier performance management
- Carrier settlement: analysis of carrier contracts and tariffs to ensures that the correct freight charges have been levied; integration with landed cost calculator and accounts payable to automate the validation and payment process.
4. **Security and Regulatory Management**

The ability to assess the capability of suppliers and service providers to meet the security and regulatory requirements of government agencies and ensure that all supporting documentation meets the import requirements.

- Import compliance monitoring: ensure that vendors and origins can be used to source a specific commodity
- Customs management: capability to ensure that products meet all compliance requirements and are accurately assessed duties on receipt, and to minimize delays in product flow at customs.
- Support for emerging Homeland Security requirements: C-TPAT (Customs-Trade Partnership Against Terrorism); FDA Prior Notice; etc.
- Comprehensive audit trails: Provide a historical record of an imported item across the entire supply chain – from the purchase order through logistics to final delivery. This issue is important for both Customs audits and compliance and for good business practices in the event of product efficacy.

5. **Financial Management**

Management and control of the financial aspects of global sourcing and logistics.

- Cash management: a *time-sliced view* of cash commitments from the initiation of a purchase order and all import related cash requirements
- Support for duty drawback and product re-import: requires comprehensive product genealogy and origin database
- Letters of credit: generation and monitoring of the execution of all letters of credit to ensure vendor compliance prior to payment execution
- Foreign currency management: the ability to see and manage foreign currency exposure and risk
- Financial settlement: manage payment requirements related to a purchase order and ensure it can be executed within the time-frames required to meet international trade terms and conditions
- Sarbannes-Oxley compliance: total visibility into all global product commitments insuring that corporate exposure is mitigated

In addition to these core functional components, SupplyChainDigest believes two additional technical capabilities should be embedded across the entire trade management solution:
- **Event management:** proactive alerting of exceptions and events as they occur during sourcing and logistics processes. Critical to provide timely information to decision-makers, take action in case a shipment is not going to make its scheduled delivery, and monitor for potential security issues.

- **Performance Measurement:** the ability to set key performance indicators (KPIs) in each area and as a total process to measure and improve performance.

**Adaptability and Integration**

In today’s environment, a global trade solution must also provide flexibility to change with evolving processes and requirements. This means that the ideal solution will include a flexible workflow engine that enables users to easily configure the application to its specific business processes and data flows, both adapt the system to its current business processes, as well as react to changing business and process requirements over time.

Even a comprehensive trade management solution will require a number of touch points with other internal systems and the multiple third parties (customs agents, freight forwards, carriers) involved in complex international logistics flows. Many of the larger transportation and logistics providers are heavily invested in EDI, and a global trade solution must support multiple EDI transaction sets. However, even many of those companies are looking to web-based EDI to increase flexibility and reduce transaction costs, and many smaller service providers and suppliers do not have EDI capabilities. Use of web-based technologies as an integration mechanism is therefore crucial in addition to EDI.

Figure 3 illustrates the key capabilities of a comprehensive global trade solution.

**Figure 3**

Global Trade Management Solution Framework

Source: SupplyChainDigest™
Benefits from Improved Global Trade Management

Companies that improve global trade management processes and technologies can make significant improvements to multiple dimensions of their supply chains, reduce costs substantially both in absolute dollars and as a percent of sales costs, while improving quality and customer service. These benefits are summarized in the table below:

<table>
<thead>
<tr>
<th>Supply Chain Area</th>
<th>Key Metrics</th>
<th>Potential Levels of Improvement</th>
<th>Source of Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Sourcing</td>
<td>Overhead and administrative costs as % of procurement spend</td>
<td>50-75% reduction in total overhead costs</td>
<td>Automation of manual processes; improved management and control</td>
</tr>
<tr>
<td></td>
<td>Total landed cost of sourced goods</td>
<td>2-5% reduction in total costs of sourced goods</td>
<td>Improved competitive sourcing; ability to accurately evaluate true total landed costs differences</td>
</tr>
<tr>
<td></td>
<td>Service levels – % of order ones delivered complete, on-time</td>
<td>10-20% improvement</td>
<td>Purchase order control – visibility into PO and logistics applications ensures on-time shipment execution</td>
</tr>
<tr>
<td>Logistics Management</td>
<td>Overhead and administrative costs as % of transportation spend</td>
<td>10-40% reduction in total global logistics overhead cost</td>
<td>Automation of manual processes; improved management and control</td>
</tr>
<tr>
<td></td>
<td>Inbound Logistics costs as % of Cost of Goods (COG) delivered to Distribution Center or Direct to Customer</td>
<td>1-3%</td>
<td>Control and visibility into all purchase and logistics SLAs ensures lowest cost-performance execution</td>
</tr>
<tr>
<td>Purchasing and Finance</td>
<td>Total Landed Cost Forecast Accuracy</td>
<td>10-25% increase in costing accuracy</td>
<td>Accurate, granular estimation of total landed costs at sourcing/PO time</td>
</tr>
<tr>
<td></td>
<td>Inventory Turns</td>
<td>20-100% improvement</td>
<td>Visibility of the entire global supply chain from sourcing through delivery enables greater accuracy in predicting and managing shipments from all sources to all destinations across the entire enterprise inventory network, dramatically reducing the finished goods inventory in distribution centers</td>
</tr>
</tbody>
</table>

In total, these benefits represent a compelling opportunity to substantially reduce overall supply chain costs and achieve a high return on investment in global trade solutions.
Summary

Three important trends are converging:
1. Globalization, and increased use of offshore contract manufacturing
2. Continued intense pressure to reduce supply chain costs
3. Focus on developing lean, more agile supply chains

In order for companies to be able to execute global sourcing strategies effectively, make the right sourcing decisions, minimize global logistics costs, and avoid the kinds of supply chain disruptions poorly executed, they require a new generation of integrated technology support across both sourcing and logistics processes.

Few companies have implemented this kind of integrated global trade solution. Some have implemented specific pieces, perhaps in the area of RFQ and PO management, or logistics visibility solution. This is a start.

But ultimately to build a world-class global sourcing operation, companies will need to expand their capabilities and craft integrated, end-to-end global trade solutions, across Sourcing and Merchandising, Purchase Order Management, Logistics, Security and Regulatory, and Financial functions. The benefits and ROI are clearly there.

About Blinco Systems

Blinco Systems’ (www.blinco.com) 3rdwave™ solution offers one of the most comprehensive global trade management solutions available on the market today. 3rdwave provides significant functionality in each of the five functional areas described above in a highly integrated solution that automates key global sourcing and logistics processes. 3rdwave provides sourcing, logistics and finance personnel with the information they need to make better decisions in as real-time an environment as required.

Importantly, Blinco also provides the depth of domain expertise in global trade and logistics processes that has helped Fortune 2000 companies adopt best practice and get the most value out of a global trade solution.

3rdwave provides exceptional global supply chain visibility. 3rdwave’s comprehensive data repository when integrated with other disparate corporate enterprise systems (ERP, CRM, SRM, SCE) captures item level details and enhances them to meet the demanding reporting, compliance and documentation requirements of global sourcing and logistics. It provides execution and visibility capabilities around the RFQ, Purchase Order or global
logistics move, validates the information and makes it available to all users in one authenticated view. This data warehouse capability insures that product information is captured, normalized and made available in real-time to operators that are mandated with the execution tasks.

3rdwave closes the loop in global trade management through its powerfull financial support capabilities. With complete estimated and actual landed cost control, 3rdwave provides complete visibility into product level costs. Integrating costing with invoice auditing and accounts payable, 3rdwave insures accurate payment settlement.

Supported with flexible workflow tools, 3rdwave enables users to establish and monitor product events and generate exception reports if critical events are not executed to plan.

Blinco System (BSI) has been developing global sourcing and logistics solutions for organizations for over 15 years. From its inception BSI has focused on enabling companies that operate in the global economy to streamline their sourcing and logistics processes to increase on-time delivery execution while reducing total landed costs. BSI provides solutions for synchronized control over the entire supply chain - from the suppliers’ suppliers to the customers’ customers - through totally integrated execution, compliance, workflow, reporting, costing and visibility tools.

Understanding that successful global supply chain solutions cannot be cobbled together and maintained from disparate point applications, BSI continues to focus on successfully developing, delivering and implementing fully integrated solutions that allow its clients to take advantage of their enterprise technology investments and support their ability to totally manage their supply chain and focus on their core competencies.

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About SupplyChainDigest

SupplyChainDigest™ is the industry’s premier interactive knowledge source, enabling end users and vendors to make better decisions through timely, relevant, in-context information. Reaching tens of thousands of supply chain and logistics decision-makers each week, SupplyChainDigest is alone in the market in creating a two-way flow of information, keeping us deeply in touch with market needs and trends, and delivering valuable market intelligence to both end users and vendors.

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