

# Complex Supply Chains Demand B2B e-Commerce Excellence

Today's complex supply chain processes cannot be supported without automation. The volume of products, orders, materials, invoices and payments simply is too large to process manually. Customers, suppliers, plants, warehouses and inventories are scattered across the globe, making paper-based business processes an unrealistic option. To manage the high transaction volumes demanded in today's global supply chain manufacturers are deploying sophisticated planning and execution systems. However, these applications require real-time information flows with high-quality data to be effective.

Due to the extensive use of outsourcing in today's supply chain, much of the data necessary for decision-making originates outside of the enterprise. A recent AMR Research study found that 1/3 of the data in a manufacturer's ERP system originates outside the enterprise. Consequently, the real-time information flows necessary to support today's complex supply chains must come from outside the enterprise. Effective decision-making depends upon B2B e-commerce with business partners such as electronic connections to contract manufacturers, original design manufacturers, third party logistics providers, freight forwarders, customs brokers and channel distributors.

To achieve the full ROI from investments in supply chain planning and execution applications, manufacturers must achieve excellence in their B2B e-commerce programs. Consider the following three examples.

## Demand Planning Depends upon B2B e-Commerce

One of the top priorities for manufacturing companies is to become more demand-driven. Consequently, most manufacturers around the world have invested in demand-driven planning, forecasting and replenishment systems. There are numerous applications utilized in different industries such as Advanced Planning & Optimization, Collaborative Forecasting, Planning and Replenishment (CPFR) and Vendor Man-

aged Inventory (VMI). However, these applications all share one common dependency for success. Each of the various supply chain planning applications are dependent upon receiving demand signals from downstream partners to be effective.

A demand signal might consist of inventory consumption data from a manufacturing line or Point-Of-Sale (POS) transactions from a retail store. In recent years, downstream customers have demonstrated an increasing level of willingness to share demand signals with their suppliers. However, the inventory and POS data is shared inconsistently – packaged in many different file formats, exchanged at many different frequencies and provided with many different levels of detail. Demand signal data must be comprehensive, cleansed and standardized to ensure the creation of an accurate forecast. Consequently, demand planning applications require a best-in-class B2B e-commerce program to ensure uninterrupted flow of real-time demand signals from as many downstream partners as possible.

## Transportation Management Depends upon B2B e-Commerce

A second example of a supply chain planning and execution application that depends upon B2B e-commerce excellence is a Transportation Management System (TMS). A TMS can automate time-consuming functions such as RFQs, bid management, load-tendering, shipment tracking, invoice auditing and payment processing. However, the greatest benefits from a TMS can be gained through the powerful analytical capabilities such as forecasting, modeling and optimization of the transportation network.

Manufacturers can achieve significant cost savings from a TMS application by optimizing labor productivity and freight utilization. However, the ROI of a TMS application will be compromised without a real-time, high quality data feed from the external entities managing the shipments.

External providers might include service companies such as 3PLs, freight forwarders, customs brokers, consolidators and transportation carriers such as ocean, rail, air, truckload and less than truckload freight operators.

Logistics providers and transportation carriers have varying B2B e-commerce capabilities. Many are small businesses with less sophisticated technology capabilities that do not include support for EDI or XML data exchange. Others are larger service providers and carriers, which do support EDI-based document exchange. However, the logistics industry is somewhat notorious for low-levels of data quality, particularly from the larger carriers. To achieve the optimal ROI from a TMS application requires a best-in-class B2B e-commerce program. The B2B platform should provide low-cost, easy-to-use mechanisms for small carriers to conduct e-commerce. Furthermore, it should provide data cleansing services to minimize exception processing in the TMS. Ideally, B2B e-commerce should provide an uninterrupted flow of shipment information from logistics providers and transportation carriers directly into the TMS to enable real-time, centralized decision making.

### Supply Chain Finance Depends upon B2B e-Commerce

The economic recession placed a premium on cash reserves for many large corporations. Many of the world's largest companies have extended payment terms from averages of 45 days to in some cases over 90. The result has been a considerable working capital challenge for suppliers of these large corporations. New programs such as Supply Chain Finance can alleviate many of the suppliers' cash flow concerns by offering accelerated payments in exchange for a nominal discount. However, the process depends upon rapid exchange of information, specifically invoicing details, between all three parties—buyer, supplier and financier.



#### About GXS

GXS is a leading provider of B2B e-commerce solutions and operates the world's largest and most expansive network of integrated business communities. The company's software and services simplify and enhance businesses process integration and collaboration among networks of trading partners. Organizations worldwide, including more than 75 percent of the Fortune 500, use GXS solutions to extend their supply chain networks, optimize product launches, automate warehouse receiving, manage electronic payments and gain supply chain visibility. Based in Gaithersburg, Maryland, GXS has operations and offices around the world. For more information, see <http://www.gxs.com>, <http://blogs.gxs.com> and <http://twitter.com/gxs>.

Specifically, the ability to process an invoice electronically is a key factor in whether an early payment discount can be obtained by the buyer.

The process works as follows. Once a buyer approves an invoice for payment, the A/P organization approaches the supplier with an option to be paid early in exchange for a small fee. However, a critical foundation to Supply Chain Finance is the ability to exchange electronic invoices in a standardized format such as EDI or XML. Invoices sent via post or e-mail for example, can delay the approval cycle by 5-10 days due to the manual workflow required.

Typically, the suppliers most in need of the funds are the smallest companies with least available credit facilities. Unfortunately, these small suppliers are also the ones with the least sophisticated technology environments which rarely support e-invoicing. Strong B2B e-commerce capabilities within the supply chain community are a critical foundation necessary for managing complex financing programs. Ideally, a B2B e-commerce program would provide low-cost, easy-to-use options for small businesses to create electronic invoices. The result will be a high percentage of invoices available for early payment and financing, which frees up working capital in the supply chain.

**NORTH AMERICA AND  
GLOBAL HEADQUARTERS**  
9711 Washingtonian Blvd.  
Gaithersburg, MD 20878, US  
+1-800-560-4347 t  
+1-301-340-4000 t  
+1-301-340-5299 f  
[www.gxs.com](http://www.gxs.com)

**EUROPE, MIDDLE  
EAST AND AFRICA**  
18 Station Road  
Sunbury-on-Thames  
Middlesex TW16 6SU  
United Kingdom  
+44 (0)1932 776047 t  
+44 (0)1932 776216 f  
[www.gxs.eu](http://www.gxs.eu)

**ASIA PACIFIC**  
Room 1609-10  
16/F China Resources Building  
26 Harbour Road, Wanchai  
Hong Kong  
+852 2884-6088 t  
+852 2513-0650 f  
[www.gxs.asia.com](http://www.gxs.asia.com)