SYSPRO™

A New Approach to Supplier Competitiveness

Executive Summary

Manufacturers and distributors are under enormous pressure to improve fulfillment capabilities. Customers want greater product and fulfillment flexibility, order and shipment visibility, Internet access, faster cycle times, more communication, and the ability to make last minute changes to their orders.

How a company manages fulfillment sets them apart from their competitors and very often determines bottom line results and market value. Those that are most successful have adopted more effective and efficient fulfillment strategies that enable them to be more responsive than reactive. Those that aren't strategic in their operations struggle to address late orders, operational cycle times, dissatisfied customers, fulfillment inefficiencies, ineffective deployment of resources and unprofitable contracts. For them it feels like customers and bottlenecks have the upper hand and that they are constantly battling one fire after another. It doesn't have to be that way. Suppliers have ceded control to the marketplace, but they can regain the power they have lost by identifying and maximizing opportunities for growth.

This paper introduces a more strategic approach to fulfillment operations that starts with optimal channel and customer relationships, informed online buying and selling, flexible product configuration and order fulfillment and integrated operational infrastructures. It is a fully integrated solution, where fulfillment decisions are driven from strategic operational objectives inherent in an integrated, enterprise wide business logic, whether serving web-based demand or traditional replenishment and order management functions.

The Suppliers' Challenge

Manufacturers and distributors are in a vicious cycle of catch up. Customers want faster delivery. Product life cycles are shortening while innovation expectations are rising. And customers are learning to expect greater product customization, value add extras and order change flexibility. For every operational or product improvement a supplier makes, the bar gets raised even higher by those best in class. This is evident in a recent study conducted by Industry Directions Inc, Becoming Demand Driven: The Foundation for e-Business Leadership. These findings demonstrate how few companies believe they have successfully achieved fundamental fulfillment capabilities, such as reducing production cycle times by 50%, perfect order fulfillment or significantly higher inventory turns. Nearly 40% of those "best in class" believe they are successful in meeting these objectives, while just a third of all others can say the same. The remaining 60-70% of companies have not achieved this new baseline of fulfillment performance, which puts them at a severe disadvantage.

The struggle to improve fulfillment performance crosses all industry sectors.

- For example, automotive suppliers forced to co-locate alongside OEMs are struggling with the high cost of setting up operations and achieving Just-In-Time performance levels. To ensure these levels are met, they need mechanisms in place designed to achieve demand driven strategic and tactical goals on a daily basis.

- For those that fabricate parts, the struggle is synchronizing schedules across the supply chain to meet promised delivery dates. By establishing flexible blanket agreements with suppliers, reducing cycle times and bottlenecks and improving equipment uptime, these business goals are more readily met.

- Manufacturers of diversified product lines desperately require the ability to maximize ROI with strong financials and accurate production data that reflect how each line contributes to the overall profit picture.

- Custom job shops are faced with ever tightening profit margins and struggling with profit margins that rely upon the generation of estimates that accurately reflect actual costs.

- Distributors have their own problems. Their very existence relies on the ability to track and value inventories - in single and multiple warehouse locations, in consignment situations and in transit. They need precise inventory tracking mechanisms that allow inventory to be valued according to warehouse location, to ship from the nearest location and to adjust records on a real-time basis as line items are entered on sales orders.

Both manufacturers and distributors are quickly moving into a business climate that is demand driven, where the ability to fulfill orders to demand, without incurring excessive inventory levels or taking a hit in margins, is often the difference between success and failure. It is also proving more difficult to achieve than was once believed. The missing element in most company's initiatives is a strategic intelligence that permeates *enterprise wide* tactical and operational decision-making. Decisions need to be based on what is best for the company - as well as for the customer. Right decisions are based on getting the right data in the right format, which differs for every company.

Furthermore, most companies tackle fulfillment at the functional level, in isolation of other interdependent departments. As a result, the improvements made in one area of the company fail to get noticed, since other areas don't leverage their performance gains. For example, the development of configurable products to speed production, improve pricing and reduce

engineering delays is only as beneficial as the willingness of the sales people to sell configured goods. The same goes for cycle time reductions in production. If nothing is done to improve transportation cycle time, the competitive opportunity may be lost.

Collaborative Commerce
SYSPRO enterprise software provides an operational business infrastructure in which the organization can establish strategic operational guidelines throughout the supply chain and provide the necessary information to make fulfillment decision-making more effective, efficient and profitable. It leverages the concept of Collaborative Commerce.

This type of infrastructure provides organization and analysis of business and market data, so that it can be used in an aggressive manner to formulate strategies that best meet the needs of targeted markets, through either traditional or Internet channels. It creates a more meaningful knowledge base on which a company can proactively use available resources and tools, such as integrated software solutions and the Web, to more efficiently and effectively satisfy the requirements of customers better than the competition. It also capitalizes on and creatively deploys available resources to gain competitive advantage to achieve short and long term goals and objectives, including high profit margins.

As companies get pressured to do more for less, they must select customers and distribution channels on the basis of profitability, cost, sales opportunity, market share, economies of scale and ownership of a market or niche. A growing number of companies are selecting and managing channels on the basis of performance and profits, as well as their ability to provide technical and process capabilities that improve communications and operations. It is these companies that focus on strategic objectives and gain insight into and control of the supply chain - in effect, turning it into an extension of the enterprise with 360 degree visibility - that will emerge as top tier suppliers in the long run.

The core elements of the solution revolve around developing win/win channel and customer relationships, having all the right information to make leveraged buying decisions and profitable sales agreements, anticipating order and fulfillment requirements in order to be highly responsive, and having the organizational fluidity to coordinate efforts, restructure operations, change processes and keep all the right people informed with what they need when they need it.

These core principals are the basis of operational strategies necessary to achieve competitive fulfillment

performance for all manufacturing and distribution companies. Many companies are already working on this to some extent or another. However, not everyone has the right tools to support their efforts in each of the four areas.

A fully integrated, extended enterprise system starts with determining what constitutes an optimal relationship with customers and channel partners, and then working to support these relationships and operational decision making. The critical success factors are recognizing where profit margins and risks lie in forming demand forecasting and planning techniques that address growth goals, promotional events and capacity constraints and value add processes that build relationship longevity.

Highest Profitability at Lowest Risk
Not long ago the idea that suppliers might elect not to do business with a prospect or customer was a radical business concept. Today, it is becoming more acceptable, and in some industries, such as retail, engineering and automotive, it is done with some frequency. The basis of these decisions very often comes down to actual costs of doing business with a particular customer, channel or contract, which impacts margins and profitability. To build optimal win/win relationships, these companies are doing advanced sales, cost and or value add analysis and using these results to make better marketing decisions, develop better product mix strategies, negotiate better deals, and craft better terms and conditions in their contracts. While some companies elect to keep under performing accounts and products for market share or other reasons, they do it knowing the risks.

Forecast Collaboration
One of the greatest struggles for suppliers is gaining visibility to actual demand. To date, channel partners and customers have held this information back from their suppliers. During the past three years, momentum has begun across a number of industry sectors to solve this problem using standardized electronic collaboration techniques. Officially this is known as Collaborative Planning, Forecasting and Replenishment (CPFR). Unofficially, it is supported by electronic planning forms used by partners to share, adjust and update demand forecasts and associated replenishment plans, similar to the CPFR approach.

Demand Planning
Another major problem for manufacturers is demand variability, particularly in the make-to-order environment. Predicting demand is hard enough for most companies that do not have the advantages of long-term contractual commitments. The issue is further compounded in the

make-to-order arena where procurement and production lead-times often exceed order fulfillment cycle times. To cover unknown availability, suppliers often carry higher levels of inventory than are desirable. This leads to the unproductive use of cash resources. However, by using sophisticated software-based forecasting tools and formulating a strategic vision, make-to-order manufacturers can rapidly maximize production resources, customer service levels and profits.

Proactive Relationships

Building and maintaining strong and mutually beneficial relationships is core to a successful fulfillment strategy and to the extension of the enterprise, which relies on the ability to be highly informed and proactive. It is the glue that keeps these relationships intact. Relationships are built up from providing the best products and services, delivering as promised and on time, having the facts on demand and communicating proactively when issues arise. Very often providing the best relationship and maintaining best in class competitiveness hinges on access to current and relevant internal *and external* information on operational capabilities, forecasts, product knowledge, inventory and capacity levels, customer history, tracking, cost and profitability analysis, and supply chain visibility. All those who interact with customers - from sales and service people to those in finance, marketing and production - need immediate and common access to applications and information that will enable them to make win/win decisions and to be proactive on behalf of the customer and the company.

Those pursuing Internet channels have a tougher challenge, which has led many of them to be creative in how they track customer needs and apply them to building relationships. In a July 2000 study by Deloitte Touche Tohmatsu, "Creating a Competitive Advantage in the New E-conomy," they found that manufacturers who adopt consumer-centric practices to build e-relationships are 60 percent more profitable than other companies. These companies stand out for their ability to extend their enterprises to:
- Gather, interpret, and use information about their customers.
- Apply the information to strengthen their brand with their end-users; and
- Develop strong relationships based on two-way communications with customers.

The Internet gives suppliers the tool they need to improve buy-side and sell-side operations and meet their business objectives. On the buy-side, the Internet reduces the cost of procurement, provides high speed, low cost communications and can be used to find lower cost suppliers. On the sell-side, it provides ways to promote products, helps identify partners in new markets and invites customers to take on the cost of configuring products, placing orders and tracking order status through self-serve mechanisms. And internally, it keeps the supply chain and customer service teams up to date.

E-Commerce Opportunities

E-commerce is providing businesses with one of the greatest growth opportunities in decades. A business that uses e-commerce within the framework of an extended enterprise solution, i.e., front- to back-office solution, is more likely to outperform others that don't have mechanisms in place to proactively respond to the needs of online customers or to achieve procurement economies of scale.

There are a number of ways a supplier can use the Internet to conduct e-commerce activities:
- Send and receive e-commerce transactions and transaction-related notifications and documentation between parties.
- Search and procure items online using supplier catalogs or marketplace engines.
- Provide customers access to information, visibility of orders and shipments and self-serve functions.
- Submit RFQ bids to participate in marketplace reverse auctions.
- Apply workflow logic to extend the enterprise by connecting internal systems and external Internet service provider systems to create new types of e-commerce "value chains" between business partners.

In addition, fulfillment cost savings and enhanced customer satisfaction can be achieved through self-serve inquiry and visibility of orders and shipment status. These also act as revenue builders and add another dimension to the buy/ sell arena.

ARC Advisory Group has stated, "To succeed, suppliers have to be prepared to use the Internet to handle sales transactions and provide customer service, link employees, and improve information flow to and from business partners."

Whether embracing e-commerce or not, those that have integrated functions and centralized capabilities to achieve strategic fulfillment objectives are able to negotiate better contract terms, consolidate requisitioning for greater price breaks and work with customers more cost effectively.

Supply Chain Communications

The Achilles' heel of most extended enterprise relationships is poor communications. Despite growing use of EDI in a number of industries and wide interest in a low cost Internet-based version of EDI, the majority of companies still communicate via phone, fax and mail. These methods are slow and fail to keep people on both sides of the equation

informed well enough to build trust in the data. Instead buyers wonder if the shipment will arrive on time and complete, and sellers wonder what last minute changes will wreck havoc on their production and warehousing operations. Those companies applying SYSPRO e.net solutions to extend and integrate the enterprise are focused on creating electronic information exchange with as many customers and suppliers as possible.

Cross-Functional Interaction
In the past decade functions supporting logistics and supply chain activities began to organize under one executive to remove barriers and improve organizational decision-making and responsiveness. Today the same is beginning to happen in functions supporting the extended enterprise. Without cross-functional supply chain and customer service teams, a fully integrated system is more lip service than reality. The right hand needs to know what the left hand is doing and what the impact or result is of their actions and decisions. They also need to get their hands on cross-functional information at a moment's notice to best serve the customer, while meeting corporate objectives. To do this companies have worked hard to extend their enterprises by integrating functions through new processes and supply-chain wide systems. This attempt is now being made easier with the XML standard for browser-based access to dispersed internal systems and wireless access for mobile personnel and suppliers and customers.

Customers want more options and are demanding last minute changes to their orders, which is challenging and costly to suppliers and their channels. To address these market forces and to create better fulfillment strategies designed to meet these demands, companies are working on several extension initiatives that have as their foundation, XML. They include engineering-driven product configurations, coordination of contracts, projects and order management, advances in supply chain planning and production practices and greater visibility of order and shipment status. These are crucial elements of an extended, integrated enterprise system and give suppliers greater control in the way customers interact with them and in how they respond.

Flexible Product Design
Whether building industrial and consumer products or mixing ingredients for consumable or intermediate products, the trend is make-to-order configured goods and packaging. For many suppliers, the introduction of configured products has provided new ways of retaining competitiveness without price cuts in standard products or without the high cost of engineering involvement in complex products. In addition, configured products simplify order entry and improve the ability to effectively schedule production and delivery to meet customer requirements. Configured items also facilitate the shift towards demand driven strategies needed to support mass customization and Internet consumers.

Cohesive Project/Contract/Order Management
Many companies struggle to successfully coordinate the functions of order fulfillment, post-delivery services and contract administration. As a result, they can't ensure that customers and channels get what they ask for or that changes in the contract or product will be shared with other departments. This is even more challenging with long-term projects under contract, demonstrated by the high number of manufacturers that fail to meet their deadlines or to keep costs under control. A more strategic approach is to integrate these functions into one extended information infrastructure, so that engineering, product configuration, purchasing, manufacturing planning, project management, budgeting, costing, billing and finance are working off the same page, populated with the latest facts.

Fulfillment Coordination
The actual fulfillment of the order also has to be coordinated across many groups - both internal and external. This is Collaborative Commerce along the supply chain, and it starts with order taking and promising, then picking and packing, followed by shipping and tracking, and ends with billing. In recent years, this process has become more complicated as customers began to ask for smaller shipments, to-order configurations, last minute changes and next day delivery options. To address these needs and reduce the costs of greater customer demands, order fulfillment strategies need to integrate supply chain execution functions and to design flexibility into their processes. Flexibility is needed in the way orders are taken, the options customers may choose, how and when products are shipped, how products are sourced and delivered, how customers track or change their orders and how they are billed. Many of these issues affect distributed resources across physical and logical sites. They can include remote production sites, distribution centers, wholesalers, carriers, brokers and suppliers. Therefore, to have effective extended enterprise solutions, these operations need to be integrated through multi-site engineering change, production and distribution functions. Then suppliers can control the fulfillment process according to the most cost effective and efficient approach that best serves their company and customers.

Inventory Visibility
Optimal inventory planning is vital to the success of any business involved in the manufacturing and distribution

of products. The most successful suppliers are those able to meet customer delivery schedules while maintaining inventories at minimum levels. To do this, suppliers need accurate inventory visibility across physical or logical locations. Once they have confidence in that data, they can stop overcompensating for inbound delivery problems with excess inventory, or they can ship from multiple warehouses without keeping all finished good items in each location. In addition, sales people can be confident in their ability to quote more accurate promise dates. Once the order has shipped, customers want the ability to track its shipment status. Visibility of shipments is now possible with the integration of parcel carrier systems to supplier systems and XML-based access. Equally important to status visibility is notification of problems as they arise using a workflow and notification process, such as SYSPRO Business Alerts, so that plans can be changed where necessary and customers can be notified quickly.

Many companies find themselves working within the constraints of inflexible information architectures and incompatible business systems. Today XML-based systems make it easy for them to extend their enterprises – to change the way they do business or access information they need to get strategic control of their operations. In today's changing business climate, suppliers need to improve their fulfillment capabilities and responsiveness, so that they aren't responding to customer requirements at their own expense. Advances in information technology are making the extended enterprise possible. The Internet is also opening up communication channels, providing cost-effective links between organizations, and speeding up the time it takes to get information. While not all companies are ready to do business on the Internet, many are turning to the Internet to support their strategic operations. The Internet is not a requirement to the extended enterprise and strategic fulfillment practices, but it paves the way to more cost-effective and efficient fulfillment results.

Flexible Operational Infrastructures
Emerging manufacturers and distributors are growing, consolidating, divesting, and extending their operations to add more value. They need highly flexible systems to take advantage of strategic opportunities and to strengthen their competitiveness, gain greater market share and improve process flows. They also need highly scalable systems as well as the ability to customize their environments to be more personal and productive and to facilitate growth. As important, they need a system that enables their management team to view the company (and supply chain) as an extended enterprise while also providing the ability to gain insight into each operation of the company (and

supply chain.) Highly modular and configurable systems avoid the need for source code changes. They also provide organizations with a wide range of operational process options that can be adapted to personnel needs and can support common business tools, such as Microsoft Office.

Integrated Financials & Costing
The heart of any manufacturing system is a solid accounting application. Growing manufacturers and distributors, especially, need a sound financial system that accommodates growth and change and is fully integrated to all other enterprise applications. Companies are in business to earn profits. Strategic fulfillment decisions revolve around how they will affect the company's profitability - now and in the future. Specifically these decisions impact revenues, material costs, labor costs and ultimately the bottom line, so it's important that those making the decisions have the most accurate and current figures to guide them. In multi-entity or multi-site organizations, people need access to information that crosses these sites and rolls up from these organizations. They also need to "drill down" into divisional, regional, or geographic operations to understand what is going on and what needs to be done to get them back on track. The financial reporting options that help them the most are user-definable reports that can provide added insight into the operation as well as graphical performance reports that show actual versus projected performance or actual versus past performance.

Easy Data Access
Extended enterprise decisions result in action items that must be made available swiftly and in a comprehensive manner to suppliers, resellers and even to the markets they serve. Therefore, companies need the means to easily access data maintained in their enterprise systems in order to interface with other systems or share it with partners and virtual operations. Today, several technologies and application integration standards are emerging to solve this problem, specifically the open Internet standard, Extensible Markup Language (XML), and Microsoft's .NET architecture. *These standards facilitate the extension of the enterprise via the exchange of information between similar and dissimilar systems, the exchange of documents on the Web and the development, execution and management of distributed business processes.* These standards provide the framework for SYSPRO 6.0, which is built on SYSPRO e.net solutions, a framework based on Microsoft .NET technology.

Open Technology
As suppliers grow, integrate operations or acquire new businesses, they can't afford to be slowed down or disrupted by incompatible technology platforms or the

inability to scale their enterprise applications. Application systems that can easily run on varying hardware platforms and support operations that do not conform to corporate system standards, solves this issue. It is important that the adoption of an extended, integrated enterprise solution leverages existing platforms. Most suppliers have thin margins and limited budgets, which makes it difficult to invest in equipment upgrades or the latest advances in information systems. If companies can use existing equipment, without major outlays for new hardware or operations systems, they can invest more in application enhancements. Conversely, if their applications can run on multi-platform networks, they can upgrade equipment one piece at a time.

The SYSPRO Extended, Integrated Enterprise Solution

SYSPRO has worked with suppliers across many industries and understands the struggle many companies face to make profitable decisions in the heat of daily fire fighting. It isn't easy for people to see beyond their own functional environments and objectives, yet their myopia very often creates chaos and unnecessary costs and delays in other departments, organizations and partner companies. Added to these internal issues are the constant demands coming from customers to do more for less. It is no wonder that suppliers feel like the tail of the dog being whipped back and forth. SYSPRO believes it is possible for them to become the tail that wagged the dog, thus getting more control over their operations and financial performance, by adopting an extended, integrated software approach.

SYSPRO is leading the way with its extended, fully integrated solution, which is designed to address all the elements outlined in this paper. The pillars comprising of the SYSPRO extended, integrated enterprise software solution are: ERP; E-Commerce; Warehouse Management; APS; Business Analytics and CRM.

The SYSPRO solution includes several Business Intelligent tools that can be leveraged to provide insights into markets, customers, patterns, and such.

SYSPRO offers Business Alerts business activity monitoring software that furthers decision-making by "pushing" alerts to the desktops of managers and other key personnel upon the occurrence of pre-defined events as they are happening internally, at customer sites or along the entire value chain. This decision-support software "tool" promotes efficient, real-time decision-making.

According to SYSPRO US President Brian Stein, "With the highly competitive nature of today's business climate,

managers need immediate access to current data in order to make critical business decisions. SYSPRO offers a host of software tools to speed the delivery of information to decision makers at all levels."

Business Alerts scans mission-critical information systems on a 24/7 basis to notify functional areas of the enterprise and supply chain in real-time via LAN, WAN, Internet, and Wireless technology.

"Business Alerts software represents a giant step forward in enhancing communications and decision-support throughout the entire supply chain. While ERP software, on the most part, offers after-the-fact data, Business Alerts, by providing real-time visibility into critical data, comes as close as possible to creating the 'Zero-Latency' enterprise," said Stein.

Massive amounts of business data can be monitored to provide real-time event alerts, exception alerts, workflow monitoring and executive summary reporting. Alert messages can be configured in HTML, Text, RTF and XML formats to further communications between disparate systems in a supply chain.

Alerts may be sent as often as required based on pre-configured rules, i.e., continuously or daily, weekly or monthly at specified times.

Multiple data sources can be interrogated within the same alert logic, based on information combined from ERP, CRM and data from external disparate data sources. Special functions also allow behind-the-scenes data identification, including the ability to identify when a new record is added to a database and when important information has been changed in the database.

Business Alerts works with a company's existing data, including Microsoft SQL, Microsoft Access or any Microsoft/ODBC or C-ISAM compliant product. Installation and configuration are fast and easy. Within a day, Business Alerts can be monitoring for any defined condition, exception or event. SYSPRO provides a set of pre-configured alerts, thus allowing for quick implementation and rapid ROI. Business Alerts will immediately notify designated recipients when an alert condition occurs.

SYSPRO Business Alerts enhances communication throughout the value chain, including the sending of XML documents, connection to multiple applications at the same time and the ability to initiate a program from an alert. Business Alerts is designed to support unlimited alerts. Transport options include all e-mail, fax, wireless and network services. The delivery of alerts is also extremely flexible. Alert messages can be delivered

directly to a file in lieu of sending a message or in conjunction with sending a message.

Many variable and customizable features are built into Business Alerts to ensure that the right information is delivered to the right persons in the most effective manner. Message recipient names and addresses can be typed in directly, pulled from local address books or can be "variable" based upon the database selected, individual records affected or per the alert logic. Faxes can also be customized with information such as Name, Company, "From" Fax and choice of fax delivery, including faxing by e-mail. Messages via e-mail can include attachments and an array of variable text. Other customization & formatting features include: Password protection (internal and from the database security profile); Ability to run either locally or on the server; Categorization of alerts by choice of folders including Public, Private (with extra security), application specific, and end-user specific; Formatting of messages with choice of fonts, colors, graphics and size. (This ability extends to variable information coming directly from the database); and Previewing of messages with sample formatting with a select set of data from the live database before sending.

Other SYSPRO business intelligence tools include Business Analytics and Document Flow Manager. Both are available with SYSPRO 6.0 enterprise software. Business Analytics empowers a company to gain greater insight into operations. It provides the ability to automatically create OLAP cubes for drill down into existing data to discern patterns and develop reports that reflect each user's specific information needs. Business Analytics is a powerful tool that lets a business analyze the dimensions and indicators on which success is measured in any business framework – for example, sales by week, month, or quarter.

The powerful Document Flow Manager opens a world of connectivity, enabling a business to automate processes, integrate enterprise applications and bring customers "into the enterprise." The Document Flow Manager forms the foundation for Distribution Resource Planning outside traditional business and delivering (and receiving) required information into (and from) the hands of customers, suppliers and external disparate systems.

SYSPRO software solutions have the flexibility, openness, visibility, planning, e-commerce, collaboration and integration attributes necessary to adapt to any manufacturing and distribution environment.

Summary

Suppliers are seeking ways to compete successfully on global, national and regional playing fields while remaining profitable. The SYSPRO approach provides the extended infrastructure needed to drive the entire enterprise towards these objectives by ensuring that the right people have all the information they need to make strategic operational decisions that meet customer needs and internal corporate objectives. It takes the right system to execute this initiative successfully, one that provides "360 degree glass tunnel" visibility into - and control of - all aspects of the organization and supply chain. SYSPRO has developed the system and implementation methodology to do this, and it has become a mechanism for suppliers to leverage and extend their enterprises at a pace that will distance them from the competition and give them more power when dealing with customers. For more information about the SYSPRO solution, call (800) 369-8649 or visit our website at www.syspro.com.