

Beyond the Quick Fix

SUPPLY CHAIN SOFTWARE AIMS TO REDEFINE BUSINESS MANAGEMENT TECHNIQUES

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In order for a company to be as efficient as possible, production, inventory and distribution components must be a top priority. A focused supply chain that gets the right materials to the right places in the allotted time frame encourages repeat business. These are concepts somewhat overlooked by many business executives in today's economy.

In 2009, the focus of supply chain management is on technology convergence—how production, inventory and distribution can be monitored using a variety of innovative software tools. There is no right or wrong answer when it comes to choosing supply chain management software. The question is determining what system best fits the needs of each organization.

Companies like Infor, Epicor, i2 Technologies and Siemens offer a variety of software solutions. Some present individual management practices that focus on specific areas of the supply chain such as warehouse or transportation management while others have a more unified approach encompassing the entire organization. The one constant throughout the supply chain software industry is that customers have plenty of options.

Infor: Industrial Strength ERP

Enterprise resource planning (ERP) is just a fancy term for smorgasbord. ERP **continued**



Manufacturing execution is an aspect of enterprise resource planning (courtesy of Infor).



Infor specializes in manufacturing planning, demand planning and warehouse management for industrial manufacturers (courtesy of Infor).

brings all the functions of a company together into a single computerized software system. From customer and supplier relationships to advanced planning and manufacturing execution, its true ambition is to integrate all aspects of a company under one universal management structure.

Infor, one of the largest supply chain software providers in the world, offers these ERP systems with several software functions and a lower total cost of ownership.

"Infor delivers a complete concept-to-customer vision that allows manufacturers complete visibility and control of the product life cycle," says Andrew Kinder, director of supply chain product marketing at Infor.

These supply chain concepts include network design, demand planning, manufacturing planning, scheduling, transportation management, warehouse management and event management. The company also has several management solutions built specifically for industrial manufacturers.

"Our solutions for industrial equipment and machinery manufacturers help meet the business and industry-specific requirements needed for each company," says Kevin Piotrowski, director of discrete industry and product marketing. "Infor has more customers in industrial equipment and machinery than

any other industry solution vendor."

Infor takes a holistic view of its supply chain network rather than seeking local optimums at an individual level.

"We know each customer has a different starting point in improving the efficiency of its supply chain. They may have to solve a forecasting problem, a planning problem, a warehouse issue or transportation problem. Next year, it will be a different challenge," Kinder says. "We aim to improve specific areas of the supply chain to achieve a strong and quick return of investment in the process."

At the core of its supply chain principles, Infor assists companies by improving productivity and reducing costs.

"During times of slower growth, we find manufacturers use the opportunity to reexamine some of their business processes, streamline them and focus on supply chain initiatives that can bring them relief now and better prepare the business when the economy improves," Kinder says.

Many organizations have shed labor and closed production lines or even entire factories. This has led manufacturers to look at alternative ways to meet customer demands with fewer resources.

"They look at how IT solutions can help them gain more from less, keeping output high with less capacity," Kinder

says. "Companies are increasingly turning to analytics to understand where costs and opportunities can be found."

A renewed interest in lean manufacturing principles has also offered various ways for companies to examine supply chain management.

"Business and manufacturing is more complex than ever, and companies must become more agile and flexible. They have to prioritize what will drive profitability. Many progressive companies are applying lean philosophies to supplier replenishment in an effort to improve customer satisfaction," Piotrowski says.

Additionally, the company has incorporated many elements of sustainability and energy efficiency into its supply chain software. Both the *EAM Asset Sustainability Edition* and the *SCM Network Design* platforms incorporate management solutions to monitor energy usage and carbon emissions.

"*SCM Network Design*, for example, enables companies to factor carbon emissions related to nodes, such as plants, warehouses and stores, and transport modes including rail, air, trucking and ocean freight," Kinder says. "Organizations can take the first steps in greening their supply chain, by first calculating the carbon emissions generated and then fine-tuning it to lower those emissions, achieving cost and service objectives along the way."

In the near future, Kinder believes many supply chain software providers will begin to extend their ERP systems with specialist applications.

"Software configuration management (SCM), project management (PM), enterprise asset management (EAM) and customer relationship management (CRM) systems will replace ERP systems, which can be expensive, disruptive and require a lot of resources to manage," Kinder says. "These smaller investments are easier to manage and deliver substantial results quickly. This could be a time for innovators to take the lead again."

Epicor: Cornering the Mid-Market

Knowing your client's market is the first step in establishing the right software system. Epicor, a provider of supply chain software solutions for mid-market organizations, was founded in 1984 and serves more than 20,000 customers in 140 countries.

"We're a mid-market player in supply

chain solutions," says Rodney Winger, senior director of product marketing. "We understand exactly what this market requires and we offer software solutions on par with some of the larger providers like SAP and Oracle."

Epicor 9, the company's latest software system, is an ERP system that introduces a new approach to the way supply chain systems are designed, built and used. The architecture of the software can be used for any type of enterprise. This is part of the reason the company is referring to its product line as "business without barriers."

The software allows companies to select the fundamental options that fit their particular strategies. Customers have the option of choosing the application suites that work best with their individual needs.

"This is a continuation of what we started five years ago with the Vantage product line. It's a rebranding of sorts, the next generation of Vantage with our latest toolset," Winger says. "*Epicor 9* brings together manufacturing, distribution and financial capabilities into one system."

Winger says *Epicor 9* can be utilized effectively in the aerospace, automotive, defense and medical device industries because of its groundwork in the manufacturing sector.

"The industrial machinery market is one we examine very closely. It's a target market where our software service has always been strong in the past."

Companies like Triumph Group, Symetrics Industries, Specialty Screw Corp. and Independent Component Parts have all used many of Epicor's software solutions.

TEAM Industries, a designer and manufacturer of powertrain and chassis components, was one of the first companies to run Vantage software, and Epicor remains the foundation of its manufacturing processes and lean initiatives.

In a case study for Epicor, TEAM Industries system analyst Mark Olson discussed the company's history with the Epicor brand. "Our fingerprints are all over Vantage," Olson says. "Over the years, through focus group and other feedback we've worked cooperatively with Epicor to develop a product that meets our business needs."

Epicor has been able to bring the best of its product lines on a single code set to assist companies with the end-to-end

solutions.

"Whether you're using a high-end product configurator, a sales order system or a mobile system, it is all under one engine," Winger says.

The benefit of this integration is that many of Epicor's customers are using many of these supply chain functions and can quickly adapt to a general purpose software solution. With the Epicor *Everywhere Framework*, customers can run the software anywhere they want.

"Mac, Safari, Firefox—it's an everywhere capability. It doesn't matter to us what you run it on," Winger says. "The application even works on a Blackberry or iPhone."

Expectations for many customers shopping for software solutions are that one vendor should be able to provide everything they might need. For this reason, Winger states that all the software

support and implementation services are delivered by Epicor and Epicor only.

"We have 300 partners worldwide that handle our products and help with distribution, but no matter what the application is, it all goes through Epicor's support system."

This mixed-mode manufacturing capability gives companies options in quality management, product lifecycle management, master data management and many other areas.

Sustainability is also a growing interest at Epicor. Under its enterprise performance management (EPM) system, more than 500 key performance indicators track a variety of environmental solutions involving energy use and transportation costs, a growing need in supply chain management.

The strongest selling point for Epicor

continued



Infor believes ERP solutions will be replaced with smaller system management solutions (courtesy of Infor).



Sustainability features allow companies to monitor energy usage on the manufacturing floor (courtesy of Infor).

might be the company's ability to address real-time business strategies under a variety of different circumstances.

"Quite honestly, our software systems are developed with synchronous integration in mind," Winger says. "Whether a customer is assembling products itself or assembling-to-order where the material is completely outsourced, we've leveraged the framework and knowhow of *Epicor 9*, and it has truly become a global offering."

Siemens: An SRM Solution

A Supplier relationship management (SRM) system developed in a joint venture between Siemens and Capgemini helps customers negotiate agreements, exchange data, monitor supplier performance and identify and optimize supply sources.

Based on Siemens *Teamcenter* software, this SRM alliance is a set of processes that empower purchasing to work with suppliers to minimize costs while maintaining and improving quality, service and innovation. The software brings together product life-cycle management (PLM) and direct material sourcing with services that include solution configuration and installation, content creation and ongoing application support.

The SRM alliance is focused on delivering value to the automotive, aerospace, consumer goods, machinery and high-tech industries. It supports the

levels of supplier collaboration that are required to deliver sustainable savings and create value.

According to Siemens representatives, *Teamcenter* bridges the traditional wall that exists between development and purchasing by allowing the customer to improve financial performance. By combining this knowledge with Capgemini's ability to bring specific and focused experience in the practice of sourcing and procurement, a global alliance agreement was reached.

Siemens representatives believe none of the traditional ERP suppliers provides the sourcing functionality embedded in the *Teamcenter* backbone. Organizations are seeking suppliers to help them innovate, change and improve specifications to become part of the cost management solution. Companies want to be in a position to drive down costs.

"In terms of supplier relationship management, the perfect storm is upon us—collapsing commodity markets, increased supplier risk and tighter budgets. Now is the time for companies to consider sourcing practices that can be sustained over time. There is no substitute for strategic sourcing. Procurement has a tremendous opportunity that has not been seen in more than 50 years," says a Siemens representative.

i2 Technologies: A Global Impact

i2 Technologies assists global industrial clients with supply chain processes. Visibility, planning,

collaboration and execution solutions by i2 are used by seven of the top 11 industrial OEMs in the world. i2 believes a systemized approach is necessary to manage various cultural differences in the global market.

"We are no longer dealing with local supply chains or plants," says Aamer Rehman, vice president of manufacturing solutions. "Activities are now distributed across various trading partners around the world so our software solutions need to provide a scalable foundation for planning, collaboration visibility and exception monitoring."

i2 is well aware how the global market has impacted the supply chain software industry in the last five years.

"Different suppliers are in different stages of sophistication, so the technology platform and applications need to cater to a wide range of requirements," Rehman says. "We need to enable an evolution rather than a restricted process common with the traditional ERP approach."

i2 provides a complete footprint for order-to-delivery workflows. The software solutions can broadly fall into categories such as factory management solutions, supply and demand, transportation and custom order creation.

"The level of complexity has increased in terms of demand variation and mix variation, which supply chain planning and scheduling tools need to handle," Rehman says. "The factories of today are hybrid environments that need to address make-to-order and make-to-stock modes of production using the same set of software tools."

Tracking sustainability and environmental concerns allows i2 to keep its customer base up-to-date on green manufacturing processes, an essential service in the new energy economy.

"Our tools have the ability to consider transportation, procurement, production and other costs as planning parameters from an environmental standpoint," Rehman says. "Also, we can track actuals for effective Plan-Do-Check-Act (PDCA) procedures."

The traditional model of sales and operation planning is not feasible in today's manufacturing sector, according to Rehman. Therefore, supply chain software needs to provide a synchronized and repeatable management process.

"The existing credit crunch, a focus on improving working capital and a lower threshold in software investment

has driven software providers to offer various options to reduce the total cost of ownership. This includes managed services, software as a service (SaaS) offerings and subscription-based licensing."

The Future of the Industry

AMR Research, Inc., a group that studies supply chain and enterprise technologies, estimates that the supply chain software industry is a \$6.5 billion industry today and will grow to \$9.2 billion by 2012. The research firm predicts that recent global economic challenges will offer greater opportunities for this industry in the months and years ahead as companies continue to look for shortcuts to increase efficiency and cut down costs.

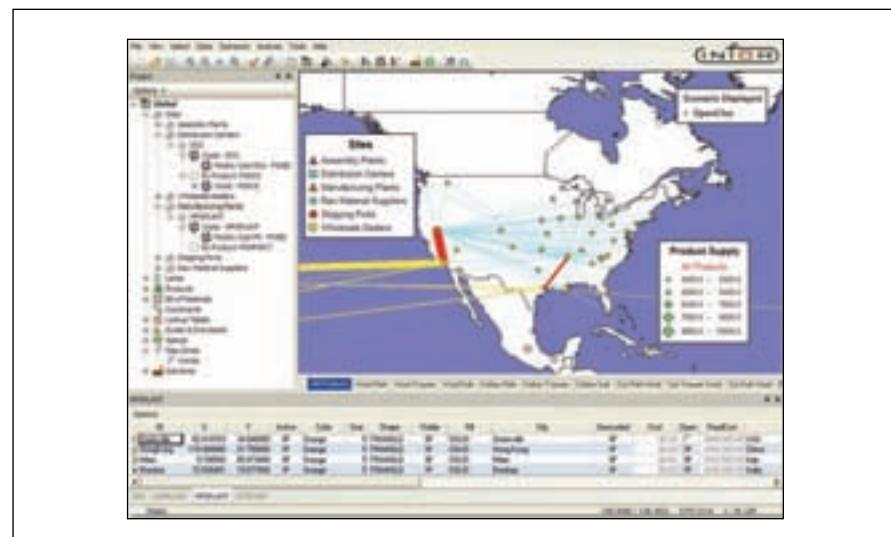
This growth will be fueled by several factors, according to AMR, including regulatory requirements to drive efficiency; growing technology markets in Europe and Asia; the need for greater supply chain flexibility; mid-market companies that want to build network capabilities; wholesale distribution and logistics industries that need a technology overhaul; and the pressure to conserve cash. Many of these factors will intrigue companies looking for long-term solutions for supply chain management.

Whether you're searching for individual business applications or an overall management solution, supply chain software is available in various levels with plenty of customizable options. Many of these programs work hand-in-hand with lean initiatives, green manufacturing techniques and time management principles. The key when seeking out this type of software service is to do some homework.

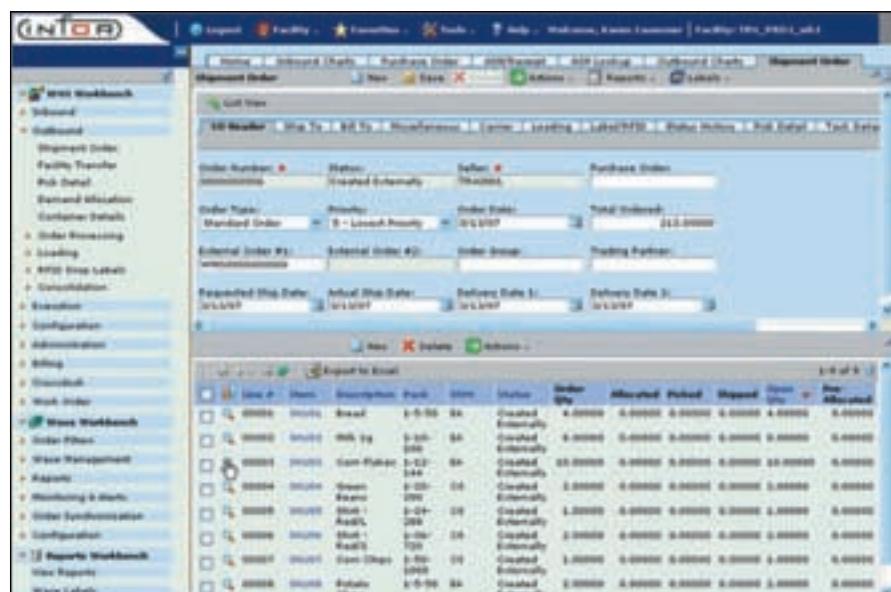
"There are no silver bullets in supply chain management. Ultimately, you have to excel in all areas if you want to achieve lower inventories, faster service, cash-to-cash cycle times and greater profitability," Infor's Kinder says. "In today's economy, these are not just 'nice to have' measures—they are survival practices."

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Infor SCM Network Design helps plan the entire supply chain from materials sourcing to manufacturing and distribution sites to method of transport between locations (courtesy of Infor).



Infor SCM Warehouse Management enables companies to see what inventory is or will be available, organize work and align resources and labor to satisfy customer requirements (courtesy of Infor).

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