INTEGRATE OR BUILD?

ERP Vendors Look for More Functionality to Cope with Demands of CPG Market

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The growing need for integration in the consumer packaged goods (CPG) market is emerging as an important influence on enterprise resource planning (ERP) vendors. Unless they can find a practical way to integrate traditional ERP packages with applications that can provide powerful functionality in such areas as logistics, customer relations, channel management, and e-commerce, consumer packaged good manufacturers will increasingly turn away from traditional ERP providers and look to other software vendors to meet their pressing needs.

So says Bruce Bond, vice president, research group director at leading industry analyst **GartnerGroup**, Stamford, Conn. “Consumer goods companies stand to win or lose in the marketplace based on their ability to handle logistics issues, customer relationships, and channel management,” says Bond. “In order to do that, they have to be able to integrate enterprise systems to the different products that provide the functionality they need to compete.”

According to Bond, a good example is the typically poor performance of ERP products in handling distribution logistics. “There are products out there that are much more adept than ERP products at supply chain logistics, so the challenge for consumer goods companies is how to integrate their ERP products with that type of application,” says Bond.

The stakes are considerable. Gartner estimates the CPG market at $2.5 billion for 1999 and projects that it will reach $11 billion by 2004.

The bottom line is that ERP vendors are trying to move aggressively into this space—yet they haven’t done very well in meeting the specific challenges presented by this specialized market. “Therefore, the partnerships that ERP vendors have developed to address the CPG market have tended to be tactical,” says Bond. “They're unable to provide the applications themselves, so they’ve moved to develop limited partnerships to furnish some kind of integration or interfacing as an interim measure."

In a recent report, **Forrester Research**, Cambridge, Mass., finds that the ERP shortcomings are particularly pronounced in the area of e-commerce. "ERP has a small role in sell-side e-commerce," says Laurie M. Orlov, analyst at Forrester. "Our interviews with 50 users of ERP applications reveal that users doubt that ERP vendors will be able to meet their Internet commerce needs. Despite a long-term desire to integrate their commerce site with their ERP system, most do not expect to be using sell-side commerce software from their ERP vendor by 2001."

The Forrester report goes on to state that ERP vendors need to shift their focus and to recognize that the way to add real value to their customers is by improving ERP's ability to integrate with leading software solutions.

Sensing both the market potential and the gaping need for enhanced functionality, an army of ERP providers, including market leader **SAP**, Walldorf, Germany, **People Soft,** Pleasanton, Calif., **Oracle**, Redwood Shores, Calif., **Symix Systems**, Columbus, Ohio, and **ROI Systems**, Minneapolis, have targeted the consumer goods arena as a means of fueling further growth in the years immediately ahead.

Major consumer goods manufacturers worldwide, such as **ITW Paslode**, Vernon Hills, Ill., and **Mott's,** a division of **Cadbury Schweppes**, London, are starting to realize the benefit of these efforts by leveraging ERP functionality for reduced inventories, optimized manufacturing processes, better distribution practices, and more responsive customer service.

Delivering the functional goods

A number of ERP functionalities are particularly valuable for the consumer packaged goods enterprise. "From a manufacturing perspective, the ability to handle hybrid processing is crucial," says Bond. "For example, when you make cookies, the process is batch at the start and discrete at delivery. As the product moves toward packaging, the manufacturing process becomes repetitive."

Tim Powers, a manager at ROI Systems, says, "Only certain software packages are designed for mixed-mode manufacturing. Although the software packages may be strong in addressing requirements for other kinds of manufacturing, without a development focus on the CPG market, some software packages may fall short of meeting needed capabilities."

According to Tom Cochrane, director of consumer goods strategy for PeopleSoft, an

ERP solution has to recognize several basic structural facets of the consumer products industry in order to work effectively. Primary among these facets are multiple channels of distribution, production-driven supply chains, and e-commerce integration.

“Because CPG companies typically serve multiple channels, the ERP system needs to be able to handle the process and operational differences among different channels—for example, food service distribution versus grocery retail,” says Cochrane.

These channels are increasingly affected by the nature and timing of product-specific promotions. “Trade promotions, rebates, seasonality—a whole litany of consumer- and marketing-driven parameters—are increasingly important in this sector,” says Bond. “So ERP products have to be able to handle this, and a lot simply can’t do it.”

Because some ERP packages fail to accommodate such promotions, planning systems based on statistical forecasts will break down unless they can model the extensive promotional events that spike the demand curves.

Core Competencies

Brian Ladyman, senior director, Oracle applications, cites four principal functional areas in which ERP functionalities benefit CPG manufacturers:

Order management.
Major shifts have occurred in consumer demographics, lifestyles, and attitudes—making themes like "convenience," "responsiveness," and "variety" pervasive. “It's necessary to get closer to customers and collaborate with them in order to better plan for and anticipate the customers’—and the customers’ customers—needs,” says Ladyman.

Supply chain management.
Consolidation at the retailer level means that power has shifted down the supply chain, with strong retailers placing increasing pressure on their suppliers for lower pricing, faster delivery, and improved product quality. Streamlining the flow of money, products, and information is critical to efficient consumer response throughout the enterprise network—and properly managing this information gives CPG manufacturers a significant advantage when dealing with their retail customers.

Process improvement.

"Despite a booming economy, levels of spending on nondurables has not kept pace with other spending categories," notes Ladyman. Add in slow overall population growth, and process manufacturers find themselves competing in a "zero-sum" game. In order to remain successful, CPG market leaders must focus on increasing their margins by continuously improving business processes. ERP systems must empower CPG manufacturers to do more with less.

Customer relationship management.

In today's competitive marketplace, companies tend to focus on reducing their supply-chain costs—for example, by reducing the number of their ship-to points and increasing their minimum order sizes. At the same time, they are trying to get closer to distributors and customers regardless of size. "To do this, their systems must communicate with their customers and distributors as efficiently as possible," Ladyman says.

Underlying all of this is what Bond refers to as "the basic CPG requirement for a lot of flexibility."

Cochrane agrees that this is a key functionality. "Key technologies must let you adapt to meet competitive threats and customer demands," he says. The implication is that, when an IT decision is made, it must be the right choice for years after installation—not just for the day the selection was made."

Cochrane says, "Tight integration is also a key. It allows you to meet conditions in the market and to react nimbly when they change."

This applies to promotion planning as well as to supply chain planning.

An area of promotions and packaging currently outside the realm of ERP systems is management of the artwork for protecting brand integrity across channels or regional markets. "We create in-house systems to manage artwork functionality," says Doug Voss, director IT supply chain systems, at **Mary Kay**, Dallas, a leading cosmetics manufacturer. "For the creation of art boards—the design and communication of specifications to suppliers and partners—our ERP system doesn't deliver the kind of business-to-business functionality needed."

While creating this in-house has some cost advantages for Mary Kay (who currently executes this process manually), Voss believes that an automated system would both speed the development and improve the accuracy of artwork for promotion and packaging initiatives.

Slaying the Inventory Dragon

Perhaps the most egregious example of enterprise systems not serving CPG companies well is in the area of inventory. Some analysts contend that there is as much as $800 billion worth of inventory in the global retail supply chain at any moment, much of it composed of "safety stock" being held by second- and third-tier suppliers who are now required to provide delivery on demand to their larger customers. Added to this inefficiency, analysts believe that manufacturers miss out on more than $130 billion in sales annually because goods are not available when consumers want them.

The inventory dragon is certainly a dangerous monster—but it's one that CPG companies are beginning to attack with automated tools. “Companies are leveraging Internet collaboration and sophisticated supply-chain solutions that enable them to synchronize sales, distribution, manufacturing, and transportation strategies and resources to the unique requirements of individual customers and channels,” says Rob Schmeltzer, senior marketing manager for Oracle.

According to Schmeltzer, better and faster access to retail point-of-sale (POS) data is leading this effort.

POS data is being fed into sophisticated demand-planning systems at the manufacturer level; these in turn are feeding manufacturing planning systems. The tighter the integration and collaboration, the lower the inventory levels.

“Additionally, manufacturers can use information technology to optimize inventory by tracking the attributes of raw materials that are unique to process inventories—such as packaging units with variable weights simultaneously lot/sublot, grade, and shelf life,” says Schmeltzer.

Again, getting close to the customer improves enterprise performance.

“Implementing a customer-centric enterprise system allows CPG manufacturers to better understand their customers by integrating sales, marketing, engineering, planning, manufacturing, financials, and service—and this helps the manufacturer connect its manufacturing operations and core business processes with supplier and customers,” says Tom Westerlund, a vice president at Symix.

This allows the manufacturer to best determine proper inventory levels.

“By embedding customers’ information into their own systems, CPG manufacturers are able to build a responsive process that allows them to deliver what a customer wants now—and react quickly to that customer's unanticipated needs," says Norton.

With such systems in place, CPG manufacturers are better able to focus on the horizon for early signs of emerging customer requirements—enabling the manufacturers to create innovative responses and keep the dragon at bay.

Hitting the nail on the head

ITW Paslode (Paslode), one of the largest divisions of Illinois Toolworks (ITW), is a manufacturer of the first commercially accepted pneumatic nailer for the construction industry. Because of engineering and manufacturing breakthroughs, the company has been able to drop the price of its nailer (and other construction tools) by nearly $100. As a result, the tools have found a new market in such large retailers as Home Depot, Menards, and Lowes.

"Now we appeal to the home-based do-it-yourselfers," says Terry Miller, manager of MIS at Paslode. "Our retail business is growing phenomenally."

Part of Paslode's success in the retail market can be attributed to its use of the recently installed Manage 2000 ERP system developed by ROI Systems. Before installing the ERP system, Paslode would take five days to ship an order.

"Today we ship the same day," says Miller. "We are making more use of drop shipping and shipping more frequently; and our distributors are having us ship directly to their dealers. We wanted our customers to order more frequently, and we wanted to get them product the next day. In some cases, because of the strategic locations of our distribution centers, we actually get orders to our distributors on the same day; but never is it longer than one day. Our old system wouldn't allow us to do that."

Paslode also relies on the ERP system's inventory management functionality to respond successfully to shifting demand in the consumer market.

"Whatever we sell out of distribution centers, our manufacturing centers have to replenish," says Miller. "The distribution centers tell the manufacturing sites what they need, so the manufacturing sites can manufacture to demand. Then we ship directly to the distribution centers. In this way, we can keep inventory really low by getting the right stuff to the right place at the right time."

This has helped Paslode flatten its manufacturing across the country—as fast as it manufactures, it ships to places where the product is in greatest demand.

"The ERP system has helped us respond to changes in demand because it enables us to react much faster," says Miller. "When you get a spike in demand, you need to respond quickly. A forecast can't anticipate that."

To further support its quick-response efforts—and assist in analyzing business trends—the company also relies on the ERP system's EDI and EIS capabilities and the business intelligence tools that connect to it.

"For the consumer market, we use 100 percent EDI. It's the tool our distributors use to place orders with us," says Miller. "To help us monitor business trends and determine what to manufacture for different areas of the country, we leverage Manage 2000's integration with Cognos' PowerPlay. We get information from the ERP system and pull it into the business intelligence application. This lets us slice and dice data and see very quickly what impact a particular plan would have in a specific market area."

More food for thought

Gartner references SAP's recently introduced Advanced Planner and Optimizer (APO) as a leading example of ERP vendor product development for the CPG market. The product has recently been implemented by Mott's, a division of London-based Cadbury-Schweppes.

Mott's manufactures over 300 products including its name-brand applesauce and juices, Mr. and Mrs. T's Mixers, Rose's Lime Juice, and Holland House cooking wines.

As part of its overall supply-chain planning redesign, Mott's has gone live with SAP's APO. The company expects benefits to include reduced working capital costs (targeted at over $5 million) through increased forecast accuracy and lower inventory, as well as decreased operating expenses (targeted at over $1 million annually) and improved customer service.

"This integrated solution will us to develop in APO a more accurate demand forecast and to integrate replenishment planning for plants, distribution centers, and customers along with execution of our R/3 system," says Jeff Morgan, director of IT at Mott's.

According to Morgan, the Mott's planning process begins with the generation of a statistical forecast, followed by the layering in of market intelligence from remote sales and marketing users, and final forecasting as part of the sales and operation process using APO. The final forecast is used for planning processes for distribution center replenishment using real-time inventory and execution information from R/3.

Captions: An area of promotions and packaging currently outside the realm of ERP systems is management of the artwork for protecting brand integrity across channels or regional markets. To overcome this problem, Mary Kay created an in-house system to manage artwork functionality.

(photos courtesy: Ross Systems)