Modern Materials Handling and MHPN

Retail industry report: Surviving in a struggling economy

Retailers are relying on the strength of materials handling best practices—from suppliers all the way through the last mile of road to the consumer's doorstep.

By Tom Andel, Editor in Chief -- Modern Materials Handling, 5/1/2008

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Some economists point at poor retail sales early this year as proof that the United States is in a recession. Consumer spending accounts for more than 70% of U.S. economic activity, and *The Wall Street Journal* recently reported that retailers are bracing for tougher times, but a good indicator of how retail is doing includes a look at supply chains. In response to the market, many retailers are asking suppliers for materials handling help doing a better job managing inventory and information.

John Barrett, chief operating officer of Wiley X Eyewear, Livermore, Calif., offers an example of how even the most specialized suppliers can be a significant partner to retailers where supply chain efficiency is concerned. This manufacturer of protective eyewear for sports enthusiasts operates out of a 26,000 square foot facility and has a satellite lens-cutting operation down the road. Wiley X will spend the rest of this year integrating that operation into its main building to cut back on inventory investment.

"If we're cutting lenses and glazing them at our factory, it's easier for me to have frames here and do lenses as I need them," Barrett explains. "I can cut down on my dollars in inventory."

Wiley X sells to 6,000 outlets, including retail and military channels, so it must differentiate case packs. The company is also working on electronic data interchange (EDI) interfacing with retail customers, many of which are two- and three-store chains and don't have EDI capability.

"Even some of our bigger customers don't have EDI capabilities and we're talking to RedTail Solutions (866-764-7601, **www.redtailsolutions.com**) about giving them the ability to place purchase orders for our goods through a slimmed down [online] interface," Barrett says.

Redtail's software as a service solution passes transactions directly into a supplier's enterprise resource planning (ERP) system, automating order entry. It allows the supplier to process retailer orders individually and respond with a series of transactions that report status, including an advanced ship notice (ASN).

"Online retail is the growth area for everyone," Barrett continues. "Web retailers are becoming more savvy as far as selling their products. They know how to optimize search engines, but on the back end order systems, they're not as savvy."

To help in that regard, Wiley X will integrate a warehouse management system (WMS) into operations. Barrett says it was important to get its physical distribution operations in shape before applying a WMS on top of them.

"We've had issues in our warehouse beyond what a WMS could accomplish," he says. "We have first embarked on creating a manual system that works and is dependable. If you have a manual system that doesn't work, a WMS is destined to fail. We created a card-based manual inventory locator system. We reorganized the warehouse so it was better for pick, pack and ship—and had a better inventory layout. The target is to have 100% accuracy on shipments.

Improving supplier accuracy

Most retail suppliers can find ways to make their customers EDI capable, but that's only one piece of a bigger puzzle. Once a retailer starts relying on EDI to enhance its receiving process, it's up to the suppliers to ensure shipment accuracy.

"It's one thing to get an 856 advanced ship notice, do your pre-splits for stores, allocate for your broken pack pick bins and determine pending orders based on a receipt for back-ordered items, but if an item doesn't show up in the quantity indicated on that ASN, you have a huge exception process to handle," says Bryan Jensen, vice president of business development for the St. Onge Company (717-840-8181, **www.stonge.com**), a supply chain and engineering consulting firm. He says this kind of mismatch happens because of human error, but adds that it happens repeatedly when retailers fail to penalize suppliers.

"If you haven't set up a good vendor shipping guide and vendor relations guide that has appropriate penalties to make it worth the supplier's while do things right, then the supplier's not motivated to do things right," Jensen says.

The retailers that are improving accuracy numbers are the ones that were once doing re-work in their own DCs, thus losing much of the savings careless suppliers offer in up-front pricing.

"If you're a retailer, give your suppliers incentive to ship accurately on a per-shipment basis right down to the ASN and get it so it behooves them to use ASNs, if you haven't already," Jensen advises. "ASNs are an extremely valuable tool for pre-planning and the thinner your in-stock positions get or the more JIT you get, the more important they are."

Many suppliers are getting the message and have chosen to work with third-party logistics (3PL) providers as information intermediaries. David Noe, vice president of sales, marketing and

customer service with 3PL APL Logistics (**www.apllogistics.com**), says EDI is still a missing component in that interface, especially when suppliers are based in other countries.

"We have vendors manually input data into our systems or via a Web site and we convert that into EDI," says Noe. "As one retailer has gotten out in front of the others in terms of RFID, we're seeing their larger vendors look at alternative supply chains to address that portion of their business."

Take an Asia-based supplier of electronic goods, for example. Five percent of its business might go through Wal-Mart. It doesn't want to be RFID compliant on every box it has, so it may outsource a 3PL to do the RFID activity and warehouse those items

Catalog retail

Accurate shipments are also a challenge on the retailer's part when managing a variety of SKUs. Williams-Sonoma, one of the major home furnishings retailers in the U.S., uses three channels to reach its customers: stores, catalog and Internet.

Williams-Sonoma offers items for every room in the house from many brands. That kind of SKU proliferation makes order selection and fulfillment some of the most labor intensive of retail distribution on the mail order side. A large part of the challenge is piece picking, and that's complex enough without retail's high workforce turnover. To combat these challenges, St. Onge developed workflow optimization software based on object-oriented technology.

The software enables operators to look at the workload and optimize the sequence of fulfillment or other tasks in the DC. That information enables them to maximize throughput and balance resources. Paul Evanko, senior vice president at St. Onge, says the program works with various constraints specified by the retailer. The package is called OAPS, order analysis and planning system. It's designed as a bolt-on to a WMS.

"Four hundred hours were saved on the peak day of their year," says Evanko. "We've also been doing some design work on a new piece of order-selection technology for case selection. This software will help optimize that system."

Home delivery

Whatever is left to go wrong in the retail chain happens in the last mile on the way to the consumer. Will O'Shea, chief sales and marketing officer for 3PD (866-373-7874, **www.3pd.com**), providers of logistics and delivery services, has developed relationships with Lowe's, Sears, J.C. Penney, Macy's and other leading retailers, to bridge the gaps between distribution center and doorstep. 3PD will receive full inbound truckloads of products, do the routing and scheduling, and contact the customers to schedule delivery.

"Throughout that process we're providing visibility of that product flow so when it comes in we're scanning that product real time, and it gives our retail partners and consumers the ability to go online and check order status," O'Shea explains. "The loads that come through our facility aren't neat and pretty. They can range from millwork to cabinets to windows. Retailers are trying to get a lot of the special

order product out of the back of their stores and go directly from the manufacturer to the consumer to eliminate the touch points in the supply chain. They also want to free up much of the real estate that product occupies when it shows up at the back room of their retail stores."

Drivers are materials handlers, too, and they use handheld scanners throughout the day and upon delivery. That information is fed back to 3PD's call center where associates check for exceptions. If a truck is running late, an alert will be sent to the other customers on that route notifying them of a delay.

O'Shea says the next step to improving that last mile would be for retailers to have one common platform for communication by which they can define their requirements.

"The ability to provide that level of information is all over the board," he adds. "The last mile of the supply chain, specifically home delivery, is still a fragmented market served by a lot of mom and pops. The experience that occurs from when the consumer enters the store and wants something delivered is an afterthought for a lot of retailers. It's also the most difficult part of the supply chain."