

## Order in the backroom

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By William Epmeier

*With space and budgets tight, supermarkets are finding creative ways to make the most of the backroom.*

The store backroom has long been the stepchild of the supply chain. While supermarkets are investing in design, equipment and technology for the sales floors and distribution centers, they are spending relatively little attention or money improving the backroom.

The focus in the backroom is to do more with less, and retailers are looking to logical layouts and space-saving strategies and equipment to help accomplish that goal. The amount of space devoted to backrooms has steadily declined over the past several decades. In the 1970s backroom storage accounted for about 30% of a store's square footage, but that amount has dwindled to 15% or less today, according to industry figures.

There are a number of valid business reasons to shrink the backroom, industry experts note. One of the key drivers to this downsizing is just-in-time inventory management. The idea is to minimize the amount of inventory that is held as back-up stock at all points throughout the supply chain and to increase the frequency of store deliveries. Thanks to more accurate POS data, supermarket operators are able to identify more precisely how many of each supermarket product sell each day, and then to order just enough to hold a store over a one- to three-day cycle.

### **STORE-FRIENDLY DELIVERIES**

Moreover, another goal of current supply chain thinking is to transfer as much inventory from the delivery truck directly to the sales floor rather than keep stock in the backroom. This approach is aimed at reducing handling costs, says Keith Swiednicki, senior partner for the logistics consulting company, KOM International, based in Montreal.

“Fifty to 60% of supply chain costs are in the last 100 meters,” he explains. Traditionally, the backroom was where most of this cost occurs as received orders are broken down, sorted by aisle and then loaded on carts to be taken to the sales floor.

Today, many retailers are pushing backroom activities back into the distribution center. Swiednicki explains that as store orders are picked, pallets are built so that merchandise is arranged by store aisle and merchandise adjacency—what he calls “store-friendly deliveries.” This strategy involves merchandise pallets that can go directly from the truck to the store's sales floor, where they are broken down and put on the shelves. The goal is to minimize handling.

Keeping track of the hundreds of variations in store layouts that can exist even within a single chain can be mind-boggling. However, Swiednicki says that one Canadian company has been able to cost justify the necessary investment in warehouse automation to prepare orders based on the layout of individual stores. Even without full automation, it is possible to prepare store orders at the warehouse so that most pallets are sorted by store aisle.

The trade-off, of course, is extra warehouse labor costs, but retailers still come out ahead, Swiednicki says. Studies conducted by KOM indicate that a “store-friendly delivery” strategy increases warehouse labor by 25%, but it decreases store labor by 33%. In terms of time this trade-off amounts to a savings of 16 seconds per case handled, “a pretty significant improvement,” he adds.

While the trend today is to minimize the role of backrooms, Frank Dell thinks this approach may have gone too far. “Management theory says that nothing should be in the backroom; [but] it’s just not proven,” says Dell, who is president of Dellmart & Co., a consulting company based in Stamford, Conn. “There’s more savings to be had from using the backroom to level out issues in the supply chain.”

“The backroom should be part of the distribution network, not part of the store network,” he added. In short, Dell counsels retailers to back off overzealous just-in-time deliveries and to hold more fast-moving merchandise back-up stock in the backroom. “You can cut 10% to 20% of truck deliveries by doing this.” Having a buffer backup stock also improves service levels.

The main complaint about backroom inventory is that no one can find it when they need it. The problem, Dell says, is that backrooms are not laid out or managed efficiently. “There’s no plan. You need to bring warehouse policies to the backroom,” and he thinks it would be worthwhile if companies had a dedicated backroom manager, someone who would know where the night stocker put away the merchandise.

Backrooms also need flow, and multiple storage options that are sized for specific merchandise categories. Dell worked on one project a number of years ago for Meijer that involved holding backup stock for 50 to 60 fast-moving items in the backroom. This stock was all assigned to specific locations and there was no problem in accessing it because it was clearly assigned and stockers were trained to know where to look.

One problem in many backrooms, Dell says, is that there is too much of the wrong kind of merchandise being stored. “One-third to one-half of all backroom inventory is from direct-store deliveries (DSD). There’s no reason for it. You don’t need more than one-day’s supply of beer or soda; tell them to come back more often!” Often there is also a lot of left-over promotional merchandise in backrooms, along with mis-ordered product. “Clean up the accuracy of scanning, which only has about an 85% success level, and you solve a lot of the problems in backrooms,” Dell says.

Among the specific areas in the backroom that are getting special attention from retailers include:

**Walk-in coolers:** Supermarket operators are pushing walk-in coolers and freezers through walls and onto concrete pads outside the perimeter of the store, where allowed. The goal, says Gary Lind, of Lind Design, College Park, N.Y., is not just to pick up more backroom storage space, but to save on lease costs, because many leases do not charge retailers full rate for areas beyond the building.

**Mobile shelving:** John Clontz, director of marketing for Madix Store Fixtures, Terrell, Texas, said there is strong demand for backroom shelving on wheels. One product for the backroom from his company that is popular is an 84-inch high shelving unit that can be parked under a pallet rack or wheeled onto the sales floor.

**Overhead storage:** As a solution to empty pallet storage problems, Steel King, based in Stevens Point, Wisc., offers the Over-Dock Pallet Storage Rack. The specially designed rack goes over the loading dock door to accommodate empty pallets, skids or returnable shipping containers. With typically two shelves installed above an average 12-foot wide dock door, almost 100 square feet of additional floor storage space can be added above each dock door.

API, a Tampa, FL-based design firm, reports that it is installing vertical lifts in some stores. The lifts can move a pallet of dry groceries to a second story for storage, explains Tom Henken, vice-president of design for API.