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WAREHOUSE MARKETS

by

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Although wide variations exist among food outlets currently called "warehouse stores" or "food warehouses," it appears that several generalizations can be made regarding the performance of these outlets. Clearly, many of these stores are more efficient than their full-line counterparts. As an illustration, 25% of the warehouse stores participating in a survey conducted recently by Willard Bishop Consulting Economists reported sales per labor hour of \$200 or more for the total store. This greater efficiency is, in large part, attributable to the operation and design of these stores. Fortunately, several productivity lessons can be learned from warehouse stores which can, in turn, be exploited by full-line food store operators.

The purpose of this paper is to briefly review several productivity lessons that can be learned from warehouse stores and to discuss their implications.

These lessons will become more important to all food store operators as they begin to realize that, "Business as usual isn't going to be good enough any more." When this conclusion is more widely accepted, operators will begin to break with traditional thinking and design in-store operations practices in order to achieve higher levels of efficiency while striving simultaneously to provide an adequate level of customer service.

This paper examines three of the most important productivity lessons that can be gleaned from the warehouse store and highlights others that are also worthy of consideration.

Customer Participation in Bagging

Warehouse stores typically require the customer to participate in both unloading groceries onto the checkstand and in bagging the groceries for movement out of the store. This customer participation is typically achieved by using one of two different checkstand configurations:

1. The belt-to-cart configuration requires the customer to place the merchandise on a front transport belt which brings the product to the checker for scanning. The checker first scans the item and then places it directly into a shopping cart. At the end of the transaction, payment is tendered and the customer moves to a separate bagging area to assemble the groceries for movement outside the store.
2. The tri-belt configuration utilizes a checkstand which one front transport belt that moves the merchandise to the checker, and two rear belts that move the product to the customer who is bagging the groceries at the back end of the checkstand. It should be noted that in the first configuration, there are sometimes three rear belts, however, this is not typical. In operation, the customer unloads the groceries on the first belt, but now the cashier slides the product onto one of the rear belts which moves the merchandise towards the back of the checkstand. The idea is that the system will simultaneously serve two customers, i.e., one for each rear

belt. Under this concept, while one customer is checked out and her order diverted to one belt, the second customer bags product from the other belt.

Both of these checkstand configurations can be highly productive. Operators using the belt-to-cart system report that checker productivity regularly exceeds 1,000 items per hour as measured on an IBM system. Warehouse store operators using the tri-belt checkstand also achieve significant levels of throughput. In a recent study conducted in two, high-volume warehouse stores in the Midwest, it was found that the stores achieved a checkout rate of 935 items per hour and 1,056 per hour respectively for a mix of large and small orders processed during peak days of the week.

While the concept of customer bagging is not new, the warehouse store-type checkstand requires customer participation in bagging and produces consistently high levels of throughput. While competitive and customer reaction must always be carefully considered, it appears that these configurations can be utilized in a more conventional store setting with appreciable improvement in checkstand efficiency. Some operators have even designed front-ends that intersperse these checkstands with more conventional models in order to utilize the best capabilities of each.

Large Pallet Displays

Warehouse stores, particularly the larger ones, frequently make extensive use of large pallet displays for seasonal or deal merchandise. Some stores such as Pick 'N Save in Milwaukee place the "deal wall" right at the entrance to the store so the customer can't miss the massive presentation of product. Other stores such as Edwards Food Warehouse in Connecticut build four or five displays across the back of the store in front of the meat case. Each of these displays contains 8 or more pallets of merchandise.

These large pallet displays are not only very effective in building price image for the store, but they also contribute to the productivity of the operation in two important ways.

1. One involves the productivity of selling space. These special displays permit the warehouse store operators to fully utilize this premium display space by filling it with fast turning merchandise. Equally important is the fact that the merchandise on these displays will typically change as seasons and buying opportunities dictate. This means that if the displays are properly managed, the selling area devoted to these displays should not be subject to the more extreme seasonal peaks and valleys that would occur if the same space were set with a space allocation for a longer period of time.
2. The other contribution involves labor productivity. The large pallet displays enable the grocery clerks to stack them with very high labor efficiency. This is particularly true if there are no requirements for item-pricing because then only the cases on top of the display need to be opened. Under these circumstances, each pallet can be brought directly from the truck to the display area and the merchandise can be prepared for sale without "tearing down" and re-building the entire display. Savings also result due to the reduced labor involved in maintaining the inventory. That is, the "holding power" of the display will virtually eliminate the need for frequent restocking.

The potential labor savings associated with the extensive use of pallet displays can be substantial. If, for example, it is assumed that 15% of the store sales are earned from these displays and processing groceries in this manner is four times more productive, the grocery department

stocking labor will be 10% lower than it would be without special displays.

Ordering to the Shelf

The efficiency of ordering most or all groceries directly to the shelf and thereby eliminating the re-handling of product is a well-established concept. The SLIM system developed in the early 1960's exploited the principle of ordering to the shelf. Today, the newest scanner-driven shelf replenishment systems also realize major operational savings in the application of this principle.

Warehouse stores typically find it easier to order to the shelf because of the reduced variety and the shelf capacity afforded by the use of warehouse racks. This means that there is little or no requirement for back room storage of product routinely ordered but lacking adequate shelf space. Eliminating this backup stock reduces both damage and store inventory, and significantly reduces grocery stocking labor. Even when warehouse stores actively forward buy certain items, the impact on labor is not severe because the product is typically stored above the display on top of warehouse racks.

The net savings of ordering to the shelf can be significant. In high-volume full-line supermarkets, some operators have saved \$30 or more per week in grocery labor through the application of this concept. The warehouse stores also realize this benefit and challenge all efficiency-minded supermarket operators to investigate the possibility.

Other Design Factors and Operating Practices Contributing to Warehouse Store Productivity

Warehouse stores employ a number of design features and operating practices that increase productivity and improve overall store performance. As with the other topics discussed, these techniques are not the exclusive domain of the

warehouse store. For this reason, it may be helpful to examine three additional concepts employed by warehouse stores which offer potential applicability in full-line supermarkets.

Limited-Variety Service Departments--

A number of warehouse stores have proven that they can add another dimension to their store offering without paying a significant productivity penalty, i.e., limited-variety service departments. Service/self-service bakeries and service deli's that carry fewer than 25 high-volume items can greatly improve efficiency. In the deli department, the use of half-pound minimum orders can also improve productivity.

New Item-Pricing--Most warehouse stores strive, where permitted by law, to utilize shelf-pricing--thereby eliminating the labor cost associated with marking individual items. Experience suggests that this savings, i.e., pricing and re-pricing, can equal .3% or more of sales.

Controlled Customer Flow--While controlled customer flow does not directly impact either labor or space productivity, it does provide a way for the operator to increase sales distribution of high gross profit perishable departments. For example, many warehouse stores have successfully used the concept combined with an emphasis on quality and variety to achieve produce sales distribution of 15% or more.

Conclusion

Warehouse stores have been highly successful in some markets but are still waiting to prove their long-term viability. Regardless of whether a supermarket operator accepts or rejects the warehouse store concept, it will be important to carefully examine the strengths of these operations in order to determine the reasons for achieving their typically high degree of effectiveness. This examination will help to identify those concepts and ideas that can, in turn, be adopted or simply used more thoroughly in the modern supermarket of the 1980's.