GROCERY HEADQUARTERS

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EQUIPMENT, DESIGN & OPERATIONS
Speeding the checkout

Independent Retailer *of the* Year

Hiller's Markets is running on all cylinders in the Motor City.

By **Greg Tuohy**

Boosting efficiency at the DC

A warehouse that is running at peak performance is vital to success.

IF YOUR DISTRIBUTION CENTER IS RUNNING AT PEAK PERFORMANCE, CONGRATULATIONS. Keep up the good work. Chances are your supermarket is enjoying the fruits of this success.

But if you think your distribution center can run more efficiently, that throughput can still be increased, costs could still be lower and manpower better utilized, here are some ways to improve your warehouse efficiency:

1. Gain an understanding of the current state of your distribution center. You must first measure and capture all data relevant to your company's operation. This would include labor expenses with overtime separated out, number of orders processed in a given amount of time, number of lines pulled by each operator, number of forklifts in operation during that time and the expense of leasing or operating each one, overall utility costs to run the distribution center and total cost per square foot of operating space in your facility.

2. Measure and record how many times an item is touched during the entire time it is in the building. Look for ways to eliminate handling items twice, keeping in mind that every time an item is touched there is the opportunity for human error. For example: Instead of picking items into a tote first and then dumping them out on a table, only to be re-packed into a carton, why not pick items directly into the shipping box?

3. By elevating some or most of the processing, packing or picking operations, use of free cubic overhead space may allow the distribution operation to extend the number of years within the existing facility. This bodes especially well from an economic standpoint for companies with favorable lease rates or those that own their building outright.

4. Gather data on the SKUs you currently have in inventory frequently. Slot your facility carefully to ensure that each SKU is mapped for the shape, weight and velocity of its particular use. Identify how fast the items move from a demand perspective, according to class and make sure the most active SKUs are assigned to locations closest to input/output points in order to maximize throughput efficiency.

5. Consider or re-think your current picking technology. Assuming you have measured accurately the number of lines being pulled by each operator, now may be the time to evaluate the feasibility of using a picking technology such as Radio Frequency (RF), Pick-To-Voice or Pick-To-Light, thus eliminating paper based picking which may not be cost-efficient for your shipping needs. Factors in making the proper picking technology decision should include density of SKU locations, required throughput, characteristics of the items you are picking, and any specialized procedures in place, such as serial number tracking.

6. Select the picking method that is right for your company. Evaluate the merits of piece picking, where a picker picks one order at a time by walking up and down each pick aisle until the entire order is complete. How cost-effective is this versus, say, batch picking (a picker picks all orders at the same time in the same pass), zone picking (pick area is broken up into individual pick zones, similar to an assembly line), or wave picking (all zones are picked at the same time, rather than having orders move from zone to zone)?

7. Practice task interleaving. This refers to the process and method of combining your active picking with the put-away process. Warehouse Management Systems (WMS) utilize logic to direct lift truck operators to put-away a pallet while enroute to the next full pallet pick. For example, if a forklift operator receives instructions to put away a pallet, the WMS will initiate a pallet pick so the forklift operator does not come back without a load. Since the average forklift operates on a 33.5 lb. LP tank, that costs an average of $25 to $30 to fill, with a tank life of only about eight hours, you can see the cost-effectiveness of not coming back empty-handed.

8. Keep system downtime to a minimum. Conveyors, carousels, palletizers and other devices such as tapers, case erectors, and stretch wrappers require planned maintenance. Equipment should be inspected, maintenance records stored with easy access, and small problems corrected immediately.

9. Examine your equipment's vulnerable points from a power management perspective. Mother Nature is not always a friend to a distribution center. If lightning issues or erratic power outages are frequent in your area, protect your distribution center from potential power spikes by using surge protectors and conditioning your service from the local electric utility provider.

These suggestions for improving the efficiency of the DC can help increase the amount of perfect orders being shipped, and in so doing ensure satisfaction at the store level and improve sales. □

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