It’s probably been a while since you re-slotted your distribution center (DC). And if you’re like most companies, there’s been a lot of change over the last few years—new SKUs, new channels, and new brands. But product location is key to DC efficiency. And you may be overlooking a fairly simple way to some real efficiency gains.

When is the last time you thought about the slotting of your distribution center? The right slotting plan can do more than help you in achieving speed and accuracy in your distribution operations—it could hold the key to enabling growth and reducing costs. Slotting is often a big part of designing a new DC for maximum efficiency, but one that is soon forgotten once the operation is up and running. New product lines and SKUs get added, companies merge, and business requirements change, but if you haven’t looked at your DC’s slotting plan recently, you might be overlooking an opportunity for competitive advantage. A properly slotted DC can:

- Free up space for additional SKUs, enabling growth of the business
- Reduce labor costs
- Improve throughput and reduce cycle times
- Increase order accuracy
- Reduce risk of injuries that lead to lost time and workers’ compensation claims
- Maximize space utilization for lower overall storage and facility costs
- Allow for better rotation of inventory

You might be a candidate for re-slotting if you are:

- Adding new product lines, additional SKUs
- Merging with or acquiring another organization
- Running out of pick faces or storage space
- Picking orders out of more than 3 pick zones
- Frequently re-working orders due to picking errors
- Experiencing high numbers of ergonomic-related injuries
You want to begin your slotting project by developing a strategy that aligns your customer service commitment with your safety, speed, and quality standards. Your goal is to create a solution that maximizes space utilization, productivity, throughput, sustainability and safety/ergonomics while minimizing cycle time and ongoing program maintenance requirements. To do that you need to perform an analysis of your current slotting situation.

Proper slotting analysis starts with a look at your product data. Dimension, weight, value, packaging, crushability, handling characteristics, and inventory levels are all factors in determining the proper storage media and picking method. Consideration is given to order profiles (pallet, case, each pick), volume, SKU velocity, SKU affinity, seasonality, conveyability, hazardous chemicals, liquids, SKU size, weight and other key attributes.

The goal of the analysis is to identify the highest impact items to re-slot. Here are 8 typical slotting opportunities to watch for:

1. **Fast-moving items located in difficult to reach locations.** SKUs with high velocities should be in ergonomically accessible locations for ease of picking and replenishment.
2. **Heavy objects on top or bottom shelf locations.** The potential for injury is greater from items falling from overhead or from lifting items located at floor level, so you want to place these items at an ergonomically advantageous level and location.
3. **Sharp or pointy objects on top shelves.** Again the danger of objects falling off overhead shelves is increased when those objects are pointy or have sharp edges that cut.
4. **Items with similar packaging or SKU numbers located too close to one another.** Similar looking items can too easily be mistaken for one another, causing picking errors and costly re-work.
5. **Seasonal items beyond their peak in prime pick locations.** You want high velocity seasonal items in easy to reach locations when they are in demand, but if they are taking up that space all year round, then you could be creating picking inefficiencies for other items.
6. **Affinity items (those items that are often ordered together) located far away from each other or in multiple pick zones.** If your pink slippers are almost always ordered at the same time as a set of pink pajamas, why not place them in proximity to one another to reduce travel in picking?
7. **Items with high potential for theft should be moved to secure locations.** You may not have a security cage in your DC, but you don't necessarily need to store small, high value items in locations where they can be easily pocketed without detection.
8. **Honeycombing.** Of course, you want to plan for growth, so leaving some open space to accommodate new SKUs is appropriate. But watch for honeycombing or excessive gaps in the storage media where space is not being fully utilized. Look around you. Do you see a lot of space above, behind and next to items in your storage media? If the space is more than you need for safety stock, ease of picking or fire code reasons, you are paying for air.

Some WMS vendors offer robust slotting tools that help guide replenishment and determine slotting strategies based on a set of pre-defined rules dictated by your operating vision and goals. They offer visual reports that illustrate how your current slotting compares to your original strategy. If you use one of these solutions, the job of maintaining your slotting strategy is certainly made easier. But the real key to slotting maintenance is
discipline. People make mistakes. The forklift driver arrives at a slotting location with a replenishment pallet only to find the location is full, and so he goes to a nearby location that appears open and puts the product there. New items are assigned a reasonably accessible, but non-prime location according to the strategy. However, over time, the item either becomes a very fast mover or a dead item. In either case, the item is not ideally located. New pick locations are added to accommodate SKU growth, but existing items remain in their current locations. Visual reports help the operations team to make informed decisions when deciding which items to re-slot and which items to leave right where they are.

How often you need to look at your DC’s slotting and make adjustments in your slotting strategy depends on your SKU counts, velocity and discipline as an organization. But if it has been awhile since you did, you might want to consider performing a slotting analysis now. You may find that you are not as out of space as you thought. And you could potentially identify opportunities to improve efficiency that you were not aware of. In any case, you will be better prepared for the next wave of SKUs to come into your warehouse.

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