

Ways to Improve Order Picking Accuracy

Whitepaper written by:

Patrick Bergin, PMP
Supply Chain Consultant



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WHITEPAPER

Order Picking Basics

Order picking is essential to the overall function of a warehouse. It should be fast, accurate, and multifaceted. It accounts for a large portion of the operating expenses in the average warehouse. Reducing or eliminating picking errors is key to improving warehouse operations and efficiency and it directly impacts operations financials.

Some warehouses use a specific order-picking system, such as pick by order, wave picking, batch picking, or zone picking. Others have chosen to lean into automation to create an environment where the staff involved in order picking can get the job done faster. Picking errors will occur regardless of the systems you have in place. However, you can work to make them less common and less costly.

Consider how much a single pick error can cost if picked inaccurately. There is the cost of the initial mis-pick, the cost to ship it back, the cost to process and restock to inventory, and then the cost to make the correct pick. In addition to the expense incurred by picking errors, the customer experience and, ultimately, customers' satisfaction are impacted negatively.

Regardless of the current pick methodology, all warehouses share a common goal. Working toward better accuracy and efficiency throughout the order-picking process is essential. There are several ways to create better accuracy, and we'll be sharing them here so you can implement them at your facility.

Evaluate the Picking Process

Jumping in and making changes isn't recommended before you have good information. Instead, take some time to evaluate the picking process first. After all, how do you know where you want to go if you don't know where you are currently?

The idea here is to uncover any gaps or problems that might make even the most demanding working order pickers make errors and be less accurate than normal. Data collection is a critical element in comprehensively evaluating the picking process. Use a combination of gap analysis, process observations and mapping, and employee interviews and discussions to identify the root cause of picking errors. These tools and analyses will help you visualize the picking process, for which you can then benchmark against metrics and KPIs to determine where there are deviations.

Consider Product Velocity

Warehouse layout and organization significantly affect how efficiently order picking can be done. Inventory slotting is one of the most significant ways you improve warehouse picking efficiency. Slotting the product into the right pick area should be done using the knowledge of product cube and velocity.

If people picking orders must move from one side of the warehouse to the other several times to get to the most ordered products, your organizational methods could use some fine-tuning. It isn't optimized as well as it could be for high productivity.

You should consider product cube, velocity, travel time, and other vital data. Find out what inventory products are the fastest to move out of the warehouse. Then make sure those products are located closest to shipping areas to access. For instance, place these fast-moving items near the loading or shipping dock, so there's less back and forth to reduce travel time for pickers.

Warehouse Zoning and Pick Methods

We discussed looking at product cube and velocity to organize and "slot" the inventory. Expanding upon inventory slotting, which means strategically placing products in the warehouse, can also go a long way forward in improving your warehouse layout. Also, when similar items are placed near each other, it's easier to find them. This can lead to a decrease in the overall picking time.

When this is done, it's known as zoning. There are zones within the warehouse for different types and categories of products. A zone-based order-picking method is typically used with this organizational strategy. The order pickers in this scenario will be assigned to specific zones and only pick from the ones that are their responsibility. In the zones with the most in-demand products, there can be more order pickers to ensure productivity is where it should be.

After you've chosen a layout based on zones, batch picking could also be an excellent way to operate. This means that workers pick several orders at once from a specific zone during one trip. Wave picking is the other standard method and combines batch and zone picking. Order pickers will build several orders from multiple zones simultaneously. The orders are then consolidated at the end.

In reality, using any of these popular picking methods relies on an organized warehouse. Organization speeds up picking. Another tip is to slot items like each other in a checkerboard pattern. That means the items that could be confused with each other are in adjacent areas but far enough apart, to help increase order-picking accuracy.

Implement Picking Routes

Assuming you have an organized warehouse, whether by grouping items together or using product cube and velocity, you can start to set up your preferred picking routes. When you have pick routes designated for use, it removes questions about how to get to the correct products. Whether using humans or machines, the worker's focus can be on accuracy.

Your picking route will vary based on your picking methods, but the basic idea is to make sure order picking is done most efficiently in a warehouse. Having optimal picking routes prevents issues like moving back through aisles that have already been used, which can lead to higher overhead costs and picking times.

Keep Accurate Inventory Data

So far, we've talked about some of the best strategies to improve order-picking accuracy. However, you need to have the proper foundation before you can start to build upon it. That is where accurate inventory data comes in. You need the inventory to be easy to find using highly identifiable products and visual indicators like rack labels and signs.

It's great to have established routes for order picking. Having all the inventory in the best locations is also helpful. However, none of these things will be as helpful as they could be if inventory ends up in the wrong place or is out of stock and no one is aware of it. Always keeping up-to-date inventory information creates more visibility for your warehouse operations. It can also give you information about product velocity and other important factors.

Consider Error Data

When you delve into the operational data for your warehouse, you might find several things you didn't know before. Some of these items can improve your return on investment (ROI). When you collect and analyze data on errors in order picking, you'll quickly find out which of the errors are happening the most. This lets you concentrate on those areas to introduce corrective actions.

Some warehouses post the group or individual error rates that all workers can see. This can increase awareness of who is doing well and who may not be. However, positive reinforcement is often considered a more effective method of changing the way people do things. Giving bonuses or prizes as incentives could be a good option.

Make Use of Automation Whenever Possible

There are many technologies available that automate warehouse processes. These include autonomous mobile robots (AMRs), shuttles, conveyors, barcode scanners, and much more. All these items are designed to reduce how much time workers spend moving items manually.

Not all these automation options are used to replace human labor. Many of the best technologies are there to help humans work faster and more accurately. This provides a warehouse with the means to improve efficiency without completely giving up the human element.

Introduce a Warehouse Control System

If you aren't already using a warehouse control system (WCS), that could be something to rectify now. Warehouse Control Systems are used to direct and manage all the automation systems within a distribution center or a warehouse. The primary purpose of a warehouse control system (WCS) is to ensure product flows efficiently across a warehouse using material handling equipment such as AMRs, sorters, conveyors, advanced MHE, and pick-to-light systems.

In many cases, the WCS controls all the automated MHE systems equipment and works with a warehouse management system (WMS). This allows it to help you plan and manage activities from receiving products to shipping them. The WMS will direct the work of humans, while the WCS focuses on directing the automated equipment.

Final Thoughts

The accuracy of your order picking can have a massive impact on your organization's operational and financial success. Using some of the strategies and steps above can streamline the facility processes. Implementing material handling equipment (MHE) systems automation and innovative software solutions will increase efficiency and accuracy at the same time.

Contact us at <u>info@hy-tek.com</u> or call us at 678.842.9114 if you want to learn more about Ways to Improve Order Picking Accuracy.