AMWARE
SCALABLE FULFILLMENT

An Amware Viewpoint

HOW TO REDUCE ECOMMERCE FULFILLMENT CENTER COSTS –

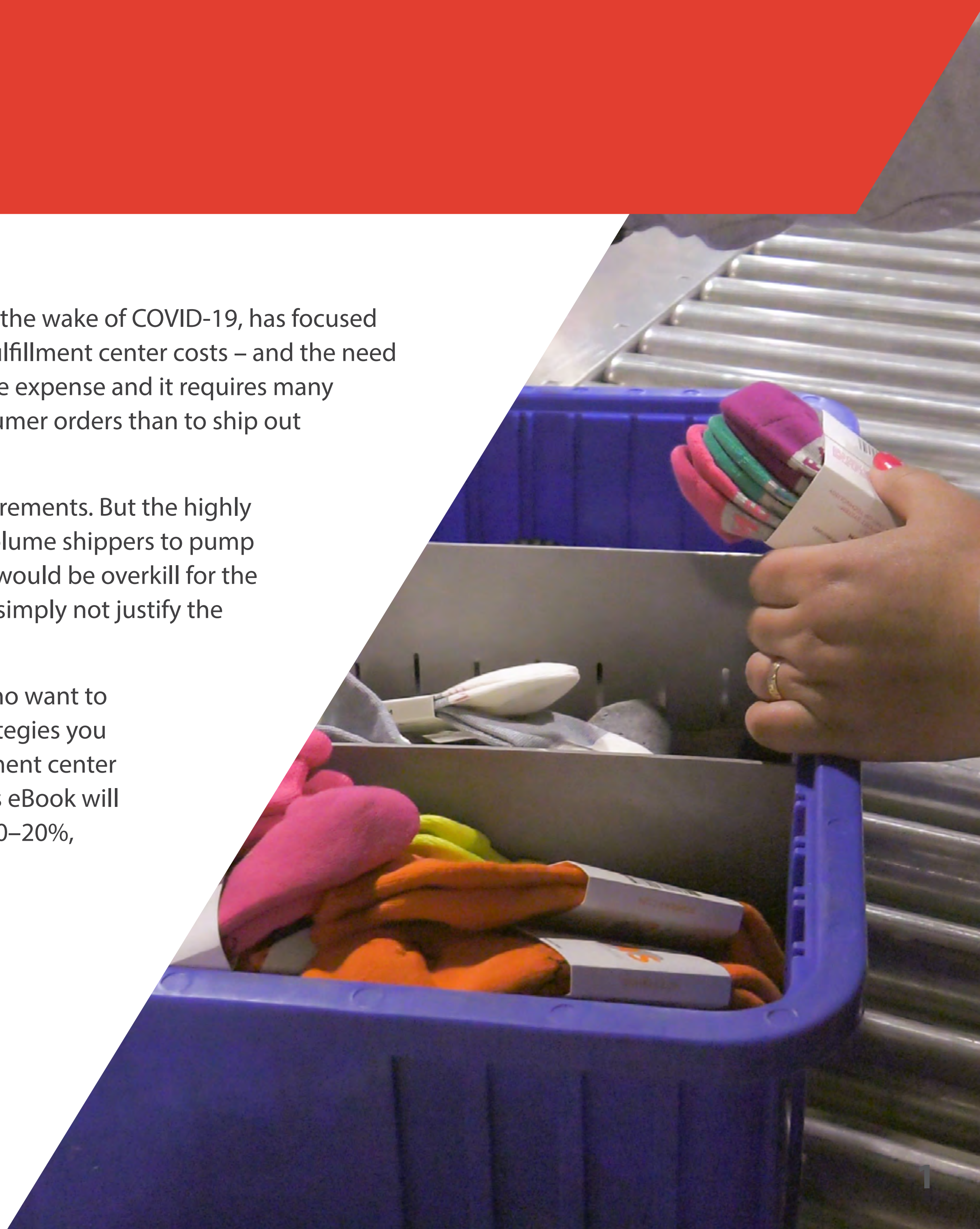
WITHOUT MAJOR CAPITAL INVESTMENTS

OPPORTUNITY

The steady rise in online orders, particularly in the wake of COVID-19, has focused more corner office attention on eCommerce fulfillment center costs – and the need to control them. Labor is the largest warehouse expense and it requires many more people to pick and pack individual consumer orders than to ship out pallets of goods to retailers.

Technology can certainly reduce staffing requirements. But the highly automated fulfillment centers used by high-volume shippers to pump out thousands and thousands of orders a day would be overkill for the vast majority of B2C shippers. Volumes would simply not justify the multi-million-dollar price tag.

Thankfully, for efficiency-minded eRetailers who want to maximize margins, there are still plenty of strategies you can employ now to reduce eCommerce fulfillment center costs – without major capital investments. This eBook will review ideas to reduce total fulfillment costs 10–20%, depending on order volume.



IMPROVE ASSOCIATE RETENTION

The most impactful thing you can do to reduce labor costs is to improve associate retention. According to supply chain consultants, Bricz, the average warehouse worker turnover level is 41%, and avoiding turnover can generate six- and seven-figure savings, depending on the size of the organization.

Where is money lost?

- Recruitment costs.
- Training and onboarding costs.
- Reduced productivity of new hires. It can take at least 4 weeks for new hires to match the productivity levels of their predecessors, depending on the complexity of the task/s. During that time, you'll require more workers for the same output.
- Increased mistakes and the related return and re-shipment costs.
- Reduced employee morale and overall productivity.

Based on our 30+ years of experience running fulfillment warehouses, we estimate the total cost of losing a productive associate to be $7,500.

What can be done to increase associate retention?

There is no limit to the strategies you can employ. Here are a few of the most important.

- **Listen**. A Gallup poll found that 52% of associates who leave say that the company could have done something to prevent their departure. Take the time to formally survey and/or informally speak to associates to uncover any concerns or ideas. Don't guess at the things that will reduce attrition; go to the source and learn what really matters.
- **Invest in hiring and keeping great distribution center managers and supervisors**. There is a saying: "Employees don't quit their job, they quit their boss," and that's certainly true in the warehouse, where immediate supervisors have a disproportionate impact on associate satisfaction. It's not easy to find professionals that combine excellent operational skills with great interpersonal skills, but if you do find them, figure out a way to keep them.
- **Show appreciation**. Being recognized and appreciated for work makes associates happier and more apt to stay. It's a simple strategy that costs little to nothing to implement. And the ways that you can show appreciation are almost endless, including saying thanks in person, sending a personal note, and providing a gift card or other incentive for job well done.

BOTTOM LINE:

Let's say you lose 100 warehouse associates a year to attrition. If you reduce that number by 15%, you'll save $112,500, not including the "soft" benefits of improved morale and a better customer experience.

PLAN BETTER

Improve your inventory forecasts

Businesses underestimate the negative impact of inaccurate forecasts on fulfillment center operations. Forecasts guide the labor plan. Too ***many*** people and these labor costs eat into your margin. Too ***few*** people and you're paying overtime, bringing in temporary workers and, very possibly, missing ship deadlines and disappointing customers.

Generally, eRetailers do a bad job predicting volumes and sharing accurate demand forecasts, in part because of poor collaboration between merchandising and logistics functions. It's not like the movie "On the Waterfront," where hundreds of shipyard workers line up every morning hoping for work. Labor is carefully planned in advance and relies on data to guide the plan.

Sometimes, the merchandising team just doesn't know. In these cases, you'll want to examine the actual run rate. If the forecast estimates 650 daily orders but you've seen 1,000 orders a day for the last three weeks, then the plan should be guided more by recent history.

Don't assume forecasts have to be complex and system-generated. In fact, simple communication with the fulfillment center about an upcoming promotion – "We've got a BOGO sale next week that could double volumes" – can be all that's required.

Establish productivity standards

eRetailers depress productivity when they fail to establish engineered labor standards for various warehouse tasks, like orders processed or kits produced in an hour. Results can be reported at the group level with goal-versus-actual numbers shown on monitors, or at the individual level with metrics communicated directly to associates' RF guns.

Studies have shown that associates, once informed of the goal, want to meet or beat it. But if people operating at 50% of goal are not informed and retrained, that behavior will continue and you'll literally double your labor costs. Labor standards also allow managers to plan labor by converting work units, like cases picked, to actual hours.

BOTTOM LINE:

Better forecasts can reduce total fulfillment costs by avoiding overtime and expedited shipping.

Establishing and monitoring productivity standards can increase productivity by 10–15%, depending on order volumes, and even more for poorly performing operations.

IMPROVE TRAINING

You can train too little or train too much. Both will decrease pick and pack productivity.

Companies that take shortcuts with training are looking at it the wrong way. They see training as a cost, not an investment and want to get workers out on the floor as soon as possible. But here's the problem: Poorly trained staff take much longer to become 100% productive. The more you extend this timeline, the more people you need to handle the order volume. You've effectively doubled your labor rates if you have four people operating at 50% productivity in place of two people who are 100% productive.

AS AUTHOR MICHAEL LEBOEUF SAYS

"If you believe training is expensive, you don't know the cost of ignorance."

There is also a direct correlation between poor training and an increase in mis-picks. According to a study of distribution executives by Peerless Research Group, a distribution center loses $585,000 annually due to mis-picks. Imagine cutting that figure in half through better training. All of a sudden spending a few thousand dollars extra to fully train order pickers seems like small change.

Too much training can backfire

When it comes to training in fulfillment procedures, there's such a thing as too much, too soon. With training for new hires, depth is good, breadth not so much. To get associates to maximum productivity as soon as possible, simplify the training to focus on the primary areas in which that associate will be working. Pickers pick and packers pack. When you "functionalize" training, the amount of knowledge the associate needs to learn is small and you minimize the learning curve.

Over time, as associates become comfortable, you can cross-train them on new accounts and functions. The more fully trained your staff, the more flexibility you have with labor planning. But trying to do it all right from the start will backfire.

BOTTOM LINE:

If you tally the cost of fewer errors, increased labor efficiency through cross training, increased productivity and reduced re-training time, an improved training program can easily save your organization tens of thousands of dollars per year.

STREAMLINE THE PICKING PROCESS

Batch Similar Orders

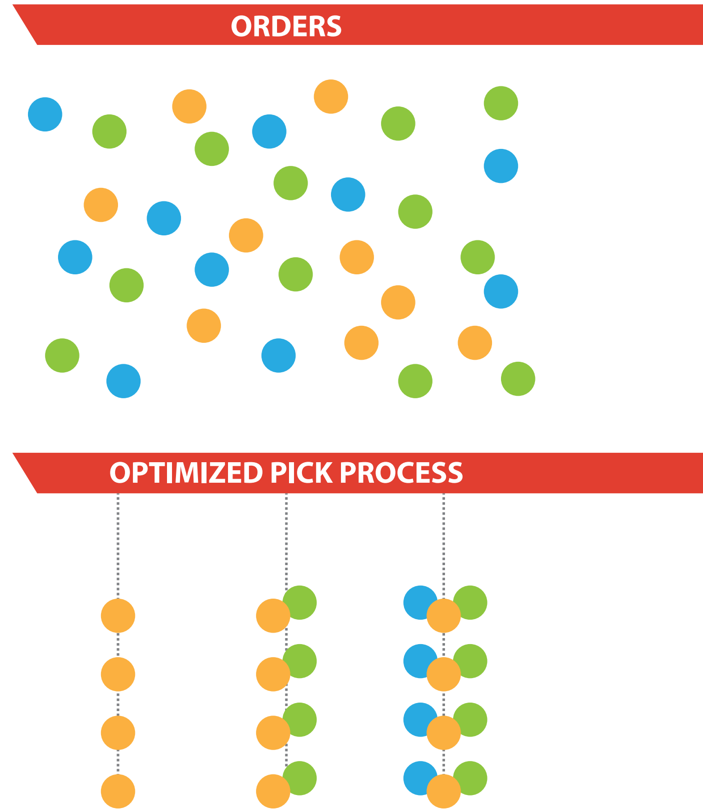
Let's say you ran a flower shop. If you had 100 orders to process, and 50 of those orders were for red roses only and the other 50 were a mix of many different flowers, you wouldn't travel out to the greenhouse 50 different times for each order of roses; you'd gather them at one time and bring them back to a central place to process. Your total trips to the greenhouse would be 51 instead of 100. The same logic applies to fulfillment orders, where popular products are found in most orders. Your warehouse management system should identify similar orders so you can process these separate from your regular, multi-SKU picking process. This is called batch picking.

Using a batch pick versus a pick-to-order process, one cleaning product manufacturer saved 15 cents per order, for a yearly labor savings of $50,000. Make sure your system or your 3PL's system can support batch picking.

Improve slotting to reduce travel time

Warehouse slotting is the process of organizing inventory to minimize space requirements and reduce travel time. In a fulfillment center, pickers can spend as much as 70% of their time traveling to and from the work. The lower that percentage, the lower your labor costs. It takes a good WMS system and a knowledgeable operations person to develop a smart slotting strategy, which should:

- Place fast movers within fast, easy reach – closest to pickers with items chest high, if possible, to reduce the need to bend or reach
- Locate items that often ship together next to each other
- Separate items that look similar to avoid mis-picks
- Balance picking activity across multiple aisles to avoid congestion
- Adjust choice locations based on seasonally popular or promoted products



Dramatic labor savings are possible when your WMS can batch similar orders to optimize the pick process

BOTTOM LINE:

You want around 80% of your orders to be picked in a forward pick area that minimizes travel time. A more efficient pick process that includes batch picking and more intelligent slotting can reduce labor costs in a fulfillment center by 25%, depending on the product mix.

LEVERAGE LOW-COST AUTOMATION

There are many warehouse automation options that reduce the requirement for people, up to and including warehouses where 100% of the picking is done by robots. That said, it is possible to over-engineer a fulfillment process if the volume and degree of complexity do not warrant a multi-million dollar automation project. Let's look at some low-cost ways to minimize labor without breaking the bank.

Automate the quality control check

At eCommerce warehouses, you'll often see a person at the end of a pack-out line doing a final check for order accuracy. But for a relatively small capital investment, you can scan bar-coded products as they are placed in a box or bag to ensure the order is 100 % accurate, avoiding the need for manual QC. The scan can also be done by pickers in the aisle, eliminating any need for a manual audit at pack-out. Most WMS systems have a module that includes scanning. If products are only sold online and don't have a bar code, you can work with your packaging manufacturer to include a scannable bar code on the actual package.

Use Function-Specific Machines like Tape Machines and Box Erectors

Machines that can automate rote tasks can make sense depending on the volume of orders being processed. Typically, you see a return on the investment within 1-2 years max.

Machines that automatically tape boxes cost between $2,500–$3,500. But in many cases these machines could replace an associate making $35,000 per year. When you speed up the pack-out process, you need fewer people. The last person on the pack-out line can be the same person who pushes boxes into the tape machine and into a gaylord for parcel shipping.

Box erectors that automatically create boxes vary widely in cost – from $20,000 to more than $100,000 depending on the number of box sizes and styles needed. For high-volume operations, the investment can make smart financial sense. EXAMPLE: one cleaning products manufacturer was manually creating 3 boxes per minute. We calculated that a box erector could do 15 per minute, taking the labor cost from $0.10 to $0.03 per box – a 70% labor savings. This particular box erector carried a hefty $130,000 price tag, but the predicted ROI was less than 2 years because of the high volume of boxes. Had the company opted for a used machine, the ROI would have been less than 1 year.

BOTTOM LINE:

When you automate regularly repeated tasks, you reduce labor – your biggest fulfillment expense. High-volume fulfillment operations can easily save hundreds of thousands of dollars a year through strategic use of low-cost automation.

IMPROVE THE PACKAGING PROCESS

Switch from Boxes to Bags

Ten years ago, chances are you were shipping B2C orders in a box. Today, many companies have shifted to polybags for smaller, lighter products because, compared to boxes, bags are:

- Cheaper to purchase
- Require less time to pack
- Are far less expensive to ship

Here is an analysis done for a wellness company comparing use of a bag versus a box for packaging.

Labor/Costs	Box	Polybag
Packaging cost	$0.25	$0.09
Labor to make/pack	15-20 seconds	<10 seconds
Shipping cost	Up to 7% reduction with polybags	

Applying these numbers to client volumes, total savings in the warehouse were $240,000 through reduced labor and packaging costs, with additional savings from reduced parcel costs.

Simplify Packaging

eRetailers carefully orchestrate the pack-out process to create an impactful consumer "unboxing" moment when the product arrives. Perhaps special tissue paper is used with several items laid into the box in a particular way and sequence. All this requires more training, more time to package and an extra QC check to ensure detailed packaging instructions were followed for each order. Brands need to consider whether these extra costs are worth the benefits of using packaging to enhance the brand experience.

One beauty products manufacturer had very elaborate pack-out requirements – even for its retail customers. Amware engineers showed the company how to streamline the pack-out process and still keep products safe and pristine in transit, while saving 50 cents on every order – an $80,000 annual savings.

BOTTOM LINE:

Packaging choices have a huge impact on warehouse labor and shipping costs. Simple changes can reduce these costs by hundreds of thousands of dollars.

LEVERAGE YOUR FULFILLMENT OPERATION TO DIFFERENTIATE YOUR BRAND

eCommerce fulfillment centers require many more workers than warehouses that ship to retailers. But it's become harder to build these added costs into the price of the product. As online sales continue to grow in the wake of COVID-19, eRetailers must act boldly to keep warehouse labor costs in check to protect margins.

The good news is you don't need to invest millions to drive 7-figure savings in your operation. When you combine smart engineers, proven processes and low-cost technology, you can cut fulfillment center costs 10–20%.

You can chase these savings yourself or outsource fulfillment to an experienced eFulfillment provider that will capitalize on all the savings opportunities outlined in this eBook.

Either way, as it becomes harder and harder for eRetailers to differentiate based on product and price, creating a high-quality, high-efficiency fulfillment operation can give you the edge you need.

ABOUT AMWARE

Amware Fulfillment helps fast-growing companies scale fulfillment operations through every stage of their growth cycle. Amware operates 11 warehouses, coast to coast, for 1-2 day delivery to 98% of the U.S.

Learn more about Amware

Contact Amware