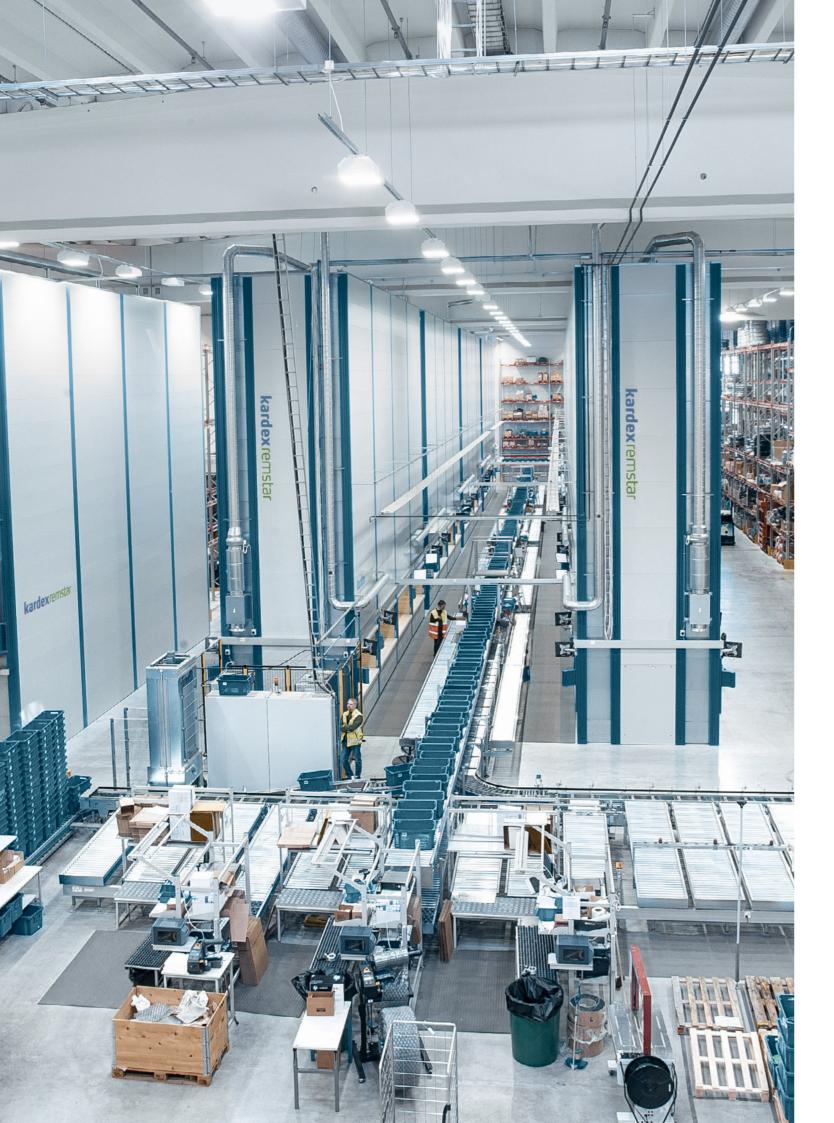
Solution Guide

Warehouse Order Fulfillment





Order fulfillment for e-commerce business

A happy shopper holds a perfectly delivered product that was possibly ordered at midnight from a location far away from where it was created. But what logistics were necessary to receive this order on time and in the exact style requested?

A warehouse order fulfillment process might be behind the scenes, but the outcome is critical to the reputation of the manufacturer and retailer. Order fulfillment can go wrong in so many ways, and when it does, customers are usually livid... and rightfully so. No purchaser wants a late or incorrect order. Would you? With so many e-commerce vendors available, why would someone return to a business that makes mistakes and misses deadlines?

As an e-commerce provider:



Would you benefit from more efficient internal systems?



Are you concerned your end users are left disappointed?



Do you worry your bottom line is impacted by fulfillment errors?



Do you fear your current warehouse is not future-proof?

New decade. New expectations.

As the e-commerce industry has grown, so have customer expectations. Today customers are placing orders more frequently, in fewer quantities, later in the day, and expecting delivery faster than ever before. Customers now consider 2-day delivery slow with next-day and even same-day delivery becoming the standard. Shoppers now think globally, demand personalization, desire immediate results, and request return refunds without a second thought.

Operation facilities are spending more time on handling returns and battling bottlenecks when using traditional fulfillment ways. The person-to-goods order picking that has worked for decades can't keep up as the number of SKUs grow and the just-in-time order demands rise.

An e-commerce warehouse that manually searches and hand-picks items suffers a major disadvantage. Without a doubt, competitors with automated warehouses have significant advantages:



Faster speed



Better accuracy



Less manual labor



More throughput

Where do you want to be?

Order picking may account for 50–70% of a facility's operating expenses. Just as important, order picking activities have a direct impact on customer satisfaction and internal labor resources. A question many new e-commerce businesses and those in need of warehouse makeovers ask is how to ensure their intralogistics are optimized?

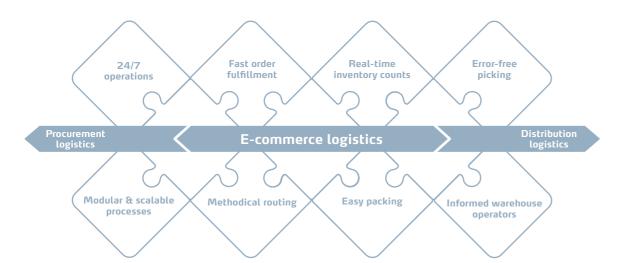
The chart below provides a clear comparison of the traditional order fulfillment process and how it compares to an automated order fulfillment system.

Traditional process: person-to-goods	Automated order fulfillment system
Order picker pushes a trolley up and down endless rows of racking to pick and fill orders	With little walking, the system delivers products to an ergonomic friendly picking window – increasing worker morale while decreasing worker injuries
Rising labor costs/selecting staff from a shrinking labor pool of candidates	Minimal staff required/minimal training necessary for new staff
Human errors are inevitable	Picking accuracy of 99%
50 lines per hour picked	600 lines per hour picked
120 bays of static shelving	One Vertical Lift Module (85% space savings); two Vertical Carousel Modules (75% space savings); two Horizontal Carousel Modules (66% space savings)
Static, open shelving may result in dirty, dusty and potentially even expired inventory	Inventory management software equipped with a FIFO (first in, first out) or LIFO (last in, first out) picking, mitigating the risk of dirt and dust impacting stock

How to move forward?

Do you already have best practices in place or are you reviewing new ways to maximize your warehouse? Below are a few suggested questions to ask when researching a new order fulfillment process:

/	Is the order fulfillment software tailored to the needs of e-commerce retailers and wholesalers? Does it consider returns, seasonal peaks and low inventory turnover?
/	Can the systems be implemented without much training?
/	Are the systems modular and scalable enough to keep pace with customer growth?
<u></u>	How does this improve stock accuracy? Can it program "first in, first out"?
<u></u>	Will staff see improved working conditions like less heavy lifting and more ergonomically friendly designs?
/	Is customer service included? Are digital services available?
\checkmark	How long will it take to see a return on investment? Is 18 months an accurate timeframe?



Inside Vihamij's warehouse

Vihamij, based in the Netherlands, is a technical wholesale company providing next day delivery of building materials to direct customers and its 37 retail stores across the country. In the company's central warehouse, they stock approximately 10,000 different articles and require fast delivery to customers.

Recently their business was growing, but the storage and order fulfillment process was not keeping up with the pace. Realizing a need for change, a partnership with Kardex Remstar enabled them to:

- 1. Substantially increase order processing to 300 order lines per person per hour
- 2. Reduce travel time
- 3. Reduce staff from 6 to 2.5

This is one example of a business Kardex Remstar helped manage staggering change, a key component for being named #13 of the Top 20 Worldwide Materials Handling System Suppliers in 2019 by Modern Materials Handling.





Meet Kardex Remstar!

Kardex Remstar has created systems to boost order fulfillment for companies in the whole-sale, retail, and e-commerce industry segment with 24-hour service and overnight delivery.

The Vertical Buffer Module Kardex Compact Buffer is one of the fastest vertical storage systems on the market, enabling businesses to increase picking performance and reduce costs. A single unit can present up to an impressive 150 storage bins per hour. To put this in perspective, that's 50% more than the number of trays a Vertical Lift Module can present per hour. In addition, combining the solution with put frames enables warehouses to speed up order picking performance, minimize picking errors, reduce walking distances, and optimize storage space and volume. In fact, warehouse personnel foot traffic may be reduced by as much as 65%.