

# Advanced Robotics Automation Takes the Pain Out of Retail Returns Management

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With online returns averaging more than 25 percent and smooth returns processes driving higher customer loyalty, retailers need robust, automated solutions that help them effectively and efficiently manage their reverse supply chains.

Geek+

Moving the world intelligently



**Merchandise returns have always been a headache for retailers that have to literally throw their supply chains in reverse to receive, inspect, process, sort and either resell or responsibly dispose of goods that customers don't want.**

However, the e-commerce boom turned up the pressure as companies suddenly found themselves getting back up to 25 percent of everything they shipped out<sup>1</sup> — versus just 9 percent for brick-and-mortar sales<sup>2</sup>— and struggling under the weight of all those returns.

Behind the scenes, the reverse retail supply chain is complex and resource-intensive. In 2022, U.S. shoppers returned nearly 27 percent of what they purchased in dollar value—up from just under 20 percent in 2019—totaling about \$279 billion in merchandise.<sup>3</sup> The highest concentration of those returns fell into the clothing, shoes, bags/accessories and consumer electronics categories.<sup>4</sup>

Managing seasonal returns is difficult for retailers, who in 2022 saw about 18 percent of all merchandise sold during the holiday shopping season returned. To put it another way, about \$158 billion in merchandise flowed through retailers' reverse supply chains for that single holiday season. Add the summer, back-to-school and other peak seasons to that list, and it's clear why retailers need robust, technology-backed systems to manage their reverse logistics processes.

Demand for reverse logistics solutions has compounded in recent years as supply chain issues continue to make headlines and get boardroom attention. As a result, big box retailers and other retail stakeholders have begun to invest significantly in solutions that offer supply chain optimization and resilience — which must now include reverse logistics by default.

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## Tackling the Returns Monster

With total product returns adding up to \$816 billion in lost sales for U.S. retailers every year,<sup>5</sup> more companies need hardware and software that help them tackle returns without contributing more labor or internal resources to the cause. With no end to the labor shortage in sight and the national unemployment rate reaching a 53-year low,<sup>6</sup> retailers can't always spare warehouse associates to handle returns. As such, they need solutions that help them do more with less.

The fact that consumers are used to ordering multiple variations of one product online and then freely returning what they don't want has increased return rates. For example, someone may see a TikTok influencer showing off a piece of apparel that, once ordered and received, simply doesn't live up to the viewer's expectations.

"If it doesn't fit right or look good, it's probably going back to the seller," said Rick DeFiesta, executive vice president of sales and solutions at Geek+. Geek+ provides advanced robotics automation solutions that help to streamline order fulfillment and returns management processes.

Time is of the essence with returns, all of which have a consumer waiting on the other end for a credit, refund or exchange. To avoid losing money on these sales, retailers must quickly reassess the item's re-marketability or have an alternate disposition plan in place.

"The longer the merchandise sits around waiting for someone to decide what to do with it, the lower the chances that it can be resold at a profit," DeFiesta said. "Customers want to be recompensated quickly, and retailers want to be able to recoup their losses by reselling the items as fast as possible."

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### **Rick DeFiesta**

Executive Vice President of  
Sales and Solutions at Geek+

## The magic happens with software

To help retailers tackle their most pressing reverse logistics challenges, Geek+ provides a complete solution that supports the physical management of the returns plus the software needed to orchestrate the returns process. The provider's goods-to-person robotics solution helps retailers consolidate returns and create a first in/first out (FIFO) inventory management system. That system automatically delivers the returned items to warehouse employees on the floor for inspection.

Geek+ robots can quickly sort returned merchandise across numerous categories and product lines using vertical sort walls. So, instead of just letting returned goods pile up in the corner of the warehouse, waiting to be inspected and sorted, retailers can use automated sorting bots to manage their inflow of returned goods effectively. Then, the same robots can retrieve the merchandise once it gets reordered by a new customer.

This process saves valuable time and resources for warehouse teams, who no longer have to touch returned merchandise multiple times to get it processed. Instead, a highly intelligent, optimized software solution sorts, stores and fetches the merchandise for easy picking and packing by employees.

"The magic happens with the software," said DeFiesta. "Our solutions interact with the employees who make the disposition decision and then move the goods to the department that cleans, disassembles, sanitizes or repackages the item."





# Measuring the benefits of automated reverse logistics

With an automated reverse logistics process in place, retailers can improve the post-purchase experience for end consumers and improve customer loyalty. This is an important win in a world where a positive returns experience is almost as crucial as the purchasing experience itself and where poor returns policies and procedures can negatively impact customer retention.

Along with improving the overall efficiency of a retailer's returns processes, smart robotics also helps companies improve security, reduce shrinkage and minimize overstocks or understocks. In turn, retailers better forecast their inventory needs, manage their existing stock and plan for seasonal fluctuations and other sales cycles.

Using advanced analytics, companies also have their returns data at their fingertips. They know what merchandise came back, its disposition, location in the warehouse (if returned to stock) and how much money they recouped as a benefit of a well-orchestrated, end-to-end returns process.

Because robotics can run 24/7, retailers can manage the returns process around the clock without hiring additional people or adding more shifts. "With automation, you can manage returns in the off-picking times because the system is going to continue to work whether your physical location is open or not," said DeFiesta. "It complements your existing workforce and helps you reallocate employees to more important tasks and projects."



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## JOMASHOP

### Advanced robotics automation in action

As an online retailer that ships more than 5,000 orders daily, Jomashop knows that a fair number of those orders will find their way back to its Brooklyn fulfillment center. Unfortunately, that's how customers behave in a modern e-commerce environment.

Founded in 1999, Jomashop is a fashion retailer for accessories that offers competitive prices on a wide range of products for both men and women. A leading online accessory retailer, the company sells eyewear, watches, cosmetics, fragrances and other products from more than 650 different top fashion brands. About 90 percent of the company's products are sold directly to consumers.





“We noticed that our return rates in the early-2000s were approximately 6 percent. Now they’re more like 9 percent, **which represents a 30 percent increase.**”

**Marvin Sternberg**

Jomashop’s President  
and Founder



Jomashop switched to an online-only model once most of its customers began shopping online. After doing so, the company experienced tremendous growth, according to Marvin Sternberg, Jomashop’s president and founder. However, the retailer’s return rates also increased. “We noticed that our return rates in the early-2000s were approximately 6 percent,” he said. “Now they’re more like 9 percent, which represents a 30 percent increase.”

Every returned product has to be inspected by a Jomashop employee who determines whether the item gets put back into stock and resold at regular price, marked down or discounted for resale, returned to the manufacturer, liquidated or destroyed.

Then, Geek+’s solution takes over and manages the process from there. In 2020, the solution replaced a manual, pick-by-hand approach that required order pickers to visit a specific location on the shelf, locate the item and then bring it to the packing station. “We literally had dozens of people who walked around the facility with order sheets, picking by shelf numbers in

a certain area of the warehouse,” Sternberg explained. “That’s the worst way to do business — especially when you have multi-item orders.”

Today, Geek+’s goods-to-person robots come to pick-and-pack employees and deliver the items needed for every order. The process works the same in reverse, with Jomashop’s returned merchandise moved automatically to specific locations by the robots and then retrieved as the goods are resold and allocated to new orders.

With its automated system in place, the growing e-commerce retailer has been able to reduce its order-picking costs and expand into new lines of business while also speeding up the processing of returned merchandise. As a result, sales and customer experience have been positively impacted since it doesn’t take as much time for Jomashop to process returns.

The company also sees fewer picking and packing errors and notably reduced workforce stress. “Every single thing here is going faster now. We’re very pleased with Geek+,” he said.

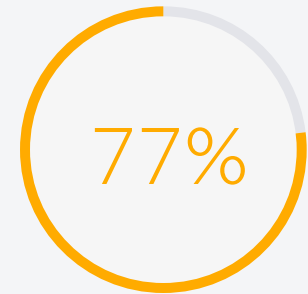
## Turning reverse logistics into an asset

Rising operating costs, a persistent labor shortage and ever-changing customer preferences are all putting new pressures on retailers in 2023. In response to these and other roadblocks, many are turning to technology and automation that help them work smarter, better and faster. Among surveyed retail executives, 77 percent are investing in technology and digital solutions in 2023, and 63 percent are focusing their efforts on warehousing and distribution, according to data gathered by KMPG.<sup>7</sup>

The reverse supply chain requires more attention as companies reimagine their networks in a world where a quarter of all online orders will make their way back to their sellers. “We’re at a point where companies can no longer rely on someone to walk the warehouse scanning locations by hand and putting returned merchandise away; there’s just too much of it,” said DeFiesta.

By implementing a smart software automation solution, retailers know exactly where everything goes, where the items are at any given point, their current condition and the resale opportunity associated with those goods. When warehouse robots deliver those items to the employee packing the order, they mitigate the risk of human error and relieve the employee of the physical burden of walking the floor to pick items.

By employing an optimal combination of hardware and software, retailers can speed up the retail supply chain in both directions, improve its accuracy, drive out waste and enhance its overall effectiveness. These efficiencies, in turn, lead to more accurate processes, faster processing times and happier customers.



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Geek+ is a global leader in robotic solutions for logistics. We develop Autonomous Mobile-Robot (AMR) solutions to realize flexible, reliable, and highly efficient automation for warehouses and supply chain management. Geek+ is trusted by over 700 global industry leaders and has been recognized as the world leader in autonomous mobile robots. Founded in 2015, Geek+ has over 1500 employees, with offices in the United States, the United Kingdom, Germany, Japan, South Korea, Mainland China, Hong Kong SAR, and Singapore.

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