MAKING THE CASE FOR

IMPROVED RETURNS HANDLING

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Confronting the Chaos of E-commerce Returns

E-commerce has proven to be an engine of growth, outpacing increases in brick and mortar retail sales and making it possible to service customers in new and faster ways. But e-commerce has its downsides, including the messy problem of managing returns.

RETURNS ARE A MASSIVE PROBLEM. According to a report from consulting firm Kurt Salmon (now part of Accenture), the return rate on e-commerce orders can be as high as 30% for soft goods such as apparel. In one day alone—"National Returns Day" on Jan. 3, 2018—UPS estimated there would be 1.4 million return shipments.

For online sales, these returns are often headed back to distribution centers (DCs) via parcel carriers or the postal service, rather than being physically returned to stores

analyst firm Gartner dubbed returns as "the ticking time bomb of multi-channel retailing."

Unfortunately, in many DCs, the returns area is little more than a rough staging area where returned goods might be quickly looked at and sorted by disposition stream. Often very little technology is applied to the process.

With only paper-based methods or spreadsheets to track the goods, time and labor are wasted putting away returned goods—only to later spend more time searching

SHOPPING ONLINE HAS BEEN EMBRACED IN A BIG WAY

In **2018**,
U.S. E-COMMERCE
RETAIL SALES
to consumers exceeded
$525 BILLION

By the end of **2020**,
E-COMMERCE SALES
are projected to top
$660 BILLION
10%
COMPOUND ANNUAL
GROWTH RATE (CAGR)

By **2025**
U.S. ONLINE
RETAIL SALES
are projected
to surpass
$ONE TRILLION

Source: Kardex Remstar

by customers. Organizing, storing, and processing online returns have become a massive challenge for DCs, one that can be aided by technology, but is often managed in more manual and chaotic ways.

The rapidly escalating issue of finding some way to efficiently manage returns from online sales is such that

and retrieving them for resale or disposition, explains Donald Gonzales, systems and integrator sales manager with Kardex Remstar, a leading provider of automated storage and retrieval system (ASRS) solutions.

"With the roughly 30% of product bought online getting returned, and the growth of e-commerce and omni-

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channel, returns coming back to DCs are a huge problem," says Gonzales. "The tendency, unfortunately, is to just have a big messy area of the DC with

UPS estimated that on National Returns Day (Jan. 3, 2018) there would be 1.4 million return shipments.

dozens of people dealing with returns, but no real process or system applied to it. But returned inventory carries a holding cost and thus should be managed and processed efficiently."

There are multiple disposition streams for returns, including restocking goods that are undamaged and still in untouched packaging, repackaging for restock in the DC or for sale in a secondary outlet channel, repair or remanufacture, return to supplier, or recycle/disposal. In some categories such as apparel, the consumer practice of ordering several sizes or colors to find one product to keep—known as bracketing—is something 40% of online shoppers have done, according to survey by Narvar, which leads to significant amount of returns that with repackaging could be resold.

Inevitably, DCs need people to examine returning goods and classify them according to appropriate disposition stream, but after that the returned inventory should be managed by an efficient material handling process. Instead, there's often chaos in how returned inventory is managed, stored, and handled. The

scale of this growing challenge can be a shock to many DC operators, notes Douglas Card, Kardex Remstar's director of systems and special applications.

"The returns handling burden is shifting from brick and mortar stores to DCs," says Card. "Brick and mortar stores have established methods for dealing with returns, but for DCs, the scale of all the returns coming directly back to them in small quantities is new territory for them. It's a paradigm shift in how returns need to be managed, and ultimately, most DCs are

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— Survey by Narvar

struggling with managing the returns process efficiently."

The absence of a returns handling strategy can negatively impact order fulfillment. Without inventory management software guiding the returns process, warehouse labor assigned to the returns area typically spends a lot of time and travel putting away goods into shelving or on floor locations, a manual and error-prone process. As a result, when it comes time to fulfill orders, even more time is wasted searching for the right items,

identifying and picking them.

Implementing automated storage & retrieval solutions (AS/RS) can minimize the returns storage and handling issues that might otherwise spiral out of control in DCs. Leveraging the same core "goods-to-person" automation benefits which AS/RS provides in the order fulfillment process can consolidate and track goods through the returns process.

"Yes, e-commerce returns are a challenging issue to address, but doesn't have to be complex," says Gonzales. "It's a matter of organizing the inventory and using automation to gain handling efficiencies and accuracy."

Importantly, the difference between a messy, manual approach to returns processing in the DC, and an automated, software-driven process, makes a difference to the bottom line. According to a report from UPS on reverse logistics, improving reverse logistics processes can help a company increase revenue by up to 5% of total sales.

While DC-level automation and software-based inventory management may be only part of the answer to financial benefits on

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— Douglas Card, director of systems and special applications, Kardex Remstar

that scale, time and labor wasted dealing with poorly organized returns inventory will factor into the profit equation of the company.

Automation Brings Order and Efficiency to Returns Processing

With e-commerce returns expected to grow at a rapid pace, it's time to examine ways automation can bring order to the chaos of returns processing and item handling area of DCs.

WHAT IS GOOD FOR COST-EFFICIENT ORDER PICKING AND STORAGE on the fulfillment side of the warehouse is good for efficiency on the returns processing side of a warehouse too. That's the good news about the growing problem of processing e-commerce returns.

On the other hand, the volume of e-commerce returns will likely increase, given e-commerce sales increased by 15.9% in 2018, representing 49% of retail growth, according to U.S. Dept. of Commerce figures. This mega-trend leaves distribution center (DC) operators with two choices for processing returns in-house: stick with manual methods and hope the problem doesn't spiral further out of control, or apply some automated equipment with integrated inventory management software to gain control over returned goods and reduce associated returns handling costs.

By applying some automated technology such as automated storage and retrieval solutions (AS/RS) to a returns area, a DC can quickly gain several key benefits, explains Douglas Card, director of systems and special applications with Kardex Remstar, a worldwide provider of AS/RS solutions.

"The efficiencies go up significantly when you deploy AS/RS for a returns environment," says Card. "The 'goods-to-person' automation eliminates travel time, while the inventory management software controls the inventory and manages rules that govern when goods should move out of returns storage to their ultimate disposition location."

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For example, some returned goods might need to be temporarily stored before being sent back to a vendor or manufacturer who provided them. Perhaps the vendor wants an entire case quantity before its shipped back, or even an entire pallet. The AS/RS can store the goods earmarked for return to manufacturer/supplier, and the rules in the inventory management software can automatically manage when the desired quantity is reached and trigger the retrieval process.

Operating on a goods-to-person principle, AR/RS can integrate pick-to-light technology, essentially eliminating time spent travel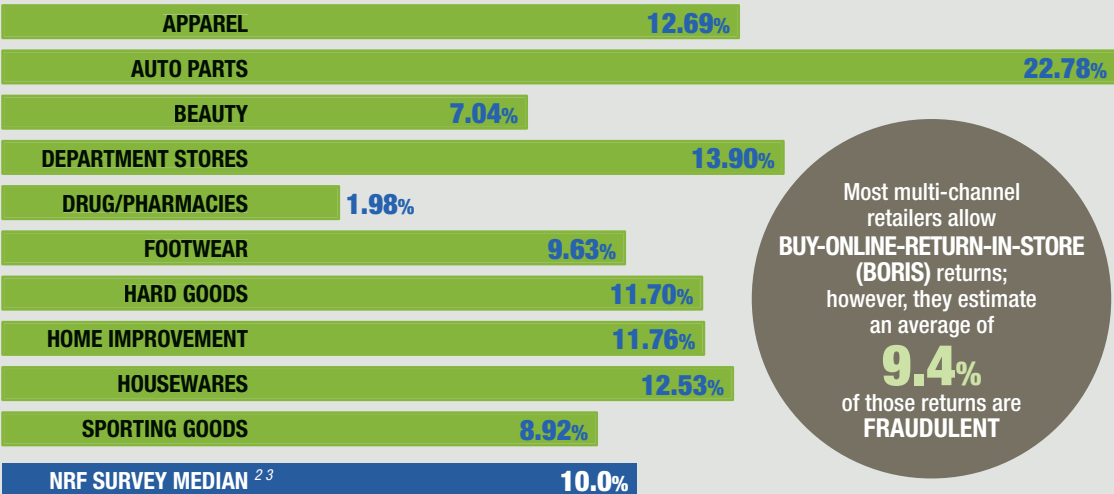ing and searching for the specific location as commonly involved in picking orders from shelves or stocking/replenishing forward pick areas. In the case of returns, as they come in they can be loaded into the AS/RS, holding return goods in accordance with how they need to be further processed or disposed of. With inventory management software, there's no searching for the goods when they need to be retrieved.

Pulling goods from the AS/RS is driven by rules-enabled software, with

AS A RESULT OF AUTOMATING THE RETURNS OPERATION, ORGANIZATIONS HAVE BEEN ABLE TO...

64% Achieve improved results in **BETTER FIRST-TIME OF MISPICKS**

58% Greater service level agreement **(SLA) COMPLIANCE**

24% **INCREASED VALUE RECLAIMED** from returned parts

77% **INCREASED CUSTOMER SATISFACTION**

Source: Kardex Remstar

FRAUDULENT RETURN RATE BY RETAIL CATEGORY

Blended return rate [1]

Category	Rate
APPAREL	12.69%
AUTO PARTS	22.78%
BEAUTY	7.04%
DEPARTMENT STORES	13.90%
DRUG/PHARMACIES	1.98%
FOOTWEAR	9.63%
HARD GOODS	11.70%
HOME IMPROVEMENT	11.76%
HOUSEWARES	12.53%
SPORTING GOODS	8.92%
NRF SURVEY MEDIAN [2][3]	10.0%

Most multi-channel retailers allow **BUY-ONLINE-RETURN-IN-STORE (BORIS)** returns; however, they estimate an average of **9.4%** of those returns are **FRAUDULENT**

[1] Retail category blended return rates are derived from Appriss Retail analysis of 40,000 stores in the specialty and general merchandise retail segments. Appriss Retail reviews data direct from e-commerce and POS T-Logs–so all returns, exchanges, employee sale returns, on-line returns, and other refund scenarios are considered to build a blended return rate.

[2] Source: National Retail Federation 2017 Organized Retail Crime Survey, November 2017.

[3] The NRF survey median return rate (10.0%) is lower than the blended return rate in several of the retail categories because in includes retailers outside of these select categories, like grocery stores.

Source: Appris Retail

ergonomic, light-driven pick stations to make picking and handling processes fast and accurate, explains Card.

"When you use AS/RS to manage returns, the system keeps the goods organized, so you can manage them according to the rules you set," says

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According to Card, the system is presenting storage locations to a light-directed pick station, so workers aren't wasting time walking or searching for empty storage locations as they would in a manual returns environment; and of course, when goods need to be retrieved, pick lights direct workers to the right location with speed and accuracy.

There are multiple types of AS/RSs that may be suitable for returns

processing. These include horizontal carousels, vertical carousels, and vertical lift modules (VLMs). A horizontal carousel, for example, provides high throughput and several carousels can be linked and outfitted with multiple pick stations to process a high volume of returned goods for a large organization.

A VLM, on the other hand, is well suited to returns management for small, high-value items that might span a wide range of dimensions. Kardex Remstar's inventory management software can integrate returns handling and enterprise order management systems to provide a complete, integrated workflow for managing returns.

In practice, AS/RS solutions can potentially replace dozens of workers needed to put away, search for, and retrieve or pick returned goods. At one warehouse, a manually run returns area was replaced with two pods of Kardex Remstar horizontal carousels with PTL pick stations. Instead of 10 workers scrambling to handle returns and search for goods in a large square foot area of shelving, three workers are now operating the two pods of horizontal carousels within a smaller footprint.

With e-commerce in high growth mode, and e-commerce returns expected to grow along with that, it's time to examine ways automation can

bring order to the chaos of returns processing and item handling area of DCs.

"Some organizations with e-commerce or multi-channel sales might be getting thousands of items in returns per day, and the more liberal the returns policy you have, the more overwhelming returns handling can be," says Donald Gonzales, systems and integrator sales manager for Kardex Remstar. "Returns handling can seem like a daunting problem, but it can be brought under better control with automation. It's a matter of using goods-to-person

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automation to gain labor efficiencies, and then it's truly the software and the way it manages locations and carries out the inventory control rules—that is the key to bringing order to your returns operation."

CASE STUDY:
Automated Carousels Bring Returns Efficiency for Multi-channel Retailer

USER: A major multi-channel retailer

CHALLENGE: This multi-channel retailer whose merchandise spans apparel, jewelry, cookware and home goods, as well as consumer electronics, was using a manual process with shelving to store and manage returns goods, leading to a labor intensive put away and pick process. Depending upon the season, at least 10 warehouse associates would be needed to handle and process returned goods.

SOLUTION: Two "pods" of automated horizontal carousels and two light-direct put walls now store and manage the returns goods for this retailer's warehouse. Instead of 10 to 12 warehouse associates, three workers using ergonomic, light-directed workstations to manage the goods and move them along to the correct dispensation stream—and for some undamaged, new inventory, pick them for new sales. Inventory management software manages the inventory in the carousels, directs the workers, and manages rules on dispensation and retrieval.

BENEFITS GAINED: Warehouse labor was reduced close to five-fold. Warehouse space dedicated for returns was reduced, and returned, unopened products in new condition could be quickly stored and made available for future sales.

TOP REASONS WHY AS/RS BENEFITS RETURNS PROCESSING: Processing e-commerce returns is a major issue not only for online "etailers," but for any retailer, distributor or other business that sells on line. A 2018 study by Zebra Technologies found that 87% of respondents agreed that accepting and managing product returns is a challenge.

There are various approaches to returns at the distribution center (DC) level. Some enterprises may choose to outsource DC-level returns processing to a third-party, but that might entail significant cost and little ability to rapidly leverage saleable returns, not to mention ceding what is becoming an increasingly important process to a partner.

If e-commerce returns are managed within your own DCs, the growth in e-commerce and associated returns are making it harder to hide the problem in a small corner of the warehouse. Without automation and software to instill order over in-house returns, that corner will likely grow into major drain on your DC's space and labor.

Fortunately, some of the same automation that makes sense for outbound fulfillment also makes sense for returns processing. In particular, automated storage & retrieval systems (AS/RSs) solutions and their inventory management software can bring order to the chaos returns processing.

HERE ARE THE TOP REASONS TO CONSIDER AS/RS FOR RETURNS HANDLING:

SIGNIFICANT LABOR SAVINGS.

If you try to store returned goods on shelving or on open floor locations, people must move the returned goods to the proper locations, as well as pick or retrieve goods for the next step in the disposition process (e.g., resell, transfer to a liquidator or third party, recycle or disposal).

All the travel involved with manual put away and pick processes can lead to spiraling labor costs. AS/RS solutions such as carousels and vertical lift modules, by contrast, operate on a "goods to person" principle where the goods are retrieved and presented to a worker at a light-directed pick station.

This eliminates nearly all travel, though some minor movement is required to place returned goods into the unit. The result is that just a couple of people using AS/RSs can process the same returns workload that it might take a dozen or more people to process with more manual methods.

TIME SAVINGS AND SPEEDY DISPOSITION.

Because AS/RS is driven by software and knows exactly where every item within it is, goods can be very quickly retrieved and presented for further movement. By contrast, DCs that attempt to store returns on shelves or open areas, especially if they rely on paper-based records, may have trouble finding and identify items. In short, AS/RS for returns processing eliminates wasted time spent looking for the right returned goods.

MORE EFFICIENT USE OF DC SQUARE FOOTAGE.

AS/RS makes use of vertical space and don't need to devote space for aisles. This makes AS/RS significantly more "dense" than typical rack and shelving. The space efficiencies will vary by site and type of product stored, but with warehouse space at a high cost premium versus several years ago, doing more in less space is a long term operational efficiency factor.

GREATER ABILITY TO LEVERAGE UNDAMAGED, EASILY SELLABLE PRODUCTS FOR NEW ORDERS.

In some warehouses where AS/RSs are used for returns, inspected, undamaged, unopened goods can be buffered in AS/RS units and be made available for new sales.

MODULAR AS/RSS CAN EASILY SCALE TO ACCOMMODATE FUTURE CAPACITY NEEDS.

As e-commerce and related returns increase, AS/RS can be scaled in multiple ways to accommodate more storage and throughput. For example, more light-directed workstations can be added to AS/RS, or two units can work together as a group—called a "pod"—servicing a common workstation. This allows a picker to access goods from one unit while others work to bring the next required item.

Integrated software is able to manage inventory levels, disposition rules, and can easily link to enterprise or reverse logistics software. Kardex Remstar software not only manages locations and executes goods-to-person retrieval, but it can be used to manage rules on batch sizes for processing returns disposition.

For instance, if a partner who handles item refurbishment wants items in a batch of 10, 20, or 50, the inventory management software can automatically manage that rule and trigger the right amount of goods to be pulled exactly when needed.

According to a UPS paper on "Rethinking Online Returns," the expense of the overall returns process can range from 20% to 65 % of the cost of goods sold, and poor execution can create additional pressure. While returns and reverse logistics also carries impact for stores and for transportation, within distribution centers, continuing to try to manage returns with manual methods is a sure way to continue to see spiraling expenses in labor, and in space requirements.

Automation with AS/RS can curb these costs and put in place the software necessary for rapid disposition of returns. While some retailers have looked to restrict liberal returns policies to try to curb the rate of online returns, that can be risky strategy, since many consumers examine returns policy when making buying decisions.

That makes automation for DC-level returns processing both a cost saver and a source of competitive advantage, since being efficient at handling returns means you can minimize costs without having to change policies in a way that harms topline growth.
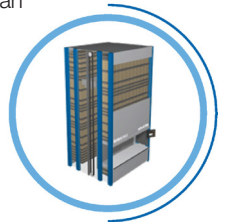
MAKING THE CASE:

AS/RS Makes Returns Processing More Effective for Everyone

The benefits of using AS/RS for returns may be most keenly felt on the warehouse floor, but span the interests of multiple roles.

WITH THE E-COMMERCE RETURN RATE running nearly 30% in some product categories, and e-commerce growing at a much faster clip than sales through traditional channels, companies face an escalating problem around how to efficiently store and process returns. Automated storage & retrieval systems (AS/RS) can bring the order and efficiency needed to meet this growing challenge.

Since AS/RS solutions such as carousels and vertical lift modules operate on a "goods-to-person" principle in which the AS/RS units present the correct goods to a worker at a workstation, warehouse floor associates will perhaps benefit most directly, because they won't be trudging down aisles or wasting time looking for goods on shelves.

Instead, they'll be focused on performing material movements at light-directed, ergonomic work stations, which will reduce physical stresses associated with walking and reaching for goods stored on shelves or on open floor space.

The benefits of using AS/RS for returns may be most keenly felt on the warehouse floor, but span the interests of multiple roles, including:

BENEFITS OF AUTOMATED STORAGE AND RETRIEVAL FOR RETURNS PROCESSING

By applying flexible and affordable automated storage and retrieval systems– such as horizontal carousels, vertical carousels and VLMs–with integrated inventory management software to a reverse logistics function within a warehouse or distribution center, e-commerce retailers will benefit from…

A significant reduction in **INVENTORY COSTS**

A significant reduction in **RETURNS HANDLING TIME**

A significant reduction in the amount of **LABOR REQUIRED TO PROCESS RETURNS**

A significant reduction in the amount of **SPACE DESIGNATED TO HOUSE RETURNED ITEMS**

FAST AND SIMPLE SORTATION OF ITEMS per their disposition destination

FASTER CREDITING of customers

QUICKER RETURN TO INVENTORY FOR RESALE, including the ability to use the returns area as a forward pick zone

Source: Kardex Remstar

BENEFITS FOR DC MANAGERS AND SUPERVISORS: Not only does AS/RS bring labor efficiencies, allowing reassignment for hard to find warehouse labor, but the automation's inventory control software allows managers to easily set rules for when to transfer or dispose of returned stock keeping units. If you want to accumulate six good/resaleable return items before transferring them to another part of the warehouse, for example, the software can manage that process. That saves time on the management side of returns disposition management, not just the labor component.

BENEFITS FOR SENIOR EXECUTIVES: Warehouse labor is hard to find and precious. By reducing the number of workers it takes to process returns versus manual methods, more warehouse labor is available to process and ship new orders and sustain growth. Since AS/RSs also create dense, space-saving storage, AS/RS for returns processing will typically also reduce space needs, which can help reduce expenditures for building or leasing warehouse space. And, while returns processing can be outsourced, outsourcing may come at a cost premium, or can make it more complex to process and transfer undamaged goods for rapid resale.

BENEFITS FOR INFORMATION TECHNOLOGY (IT) LEADERS: AS/RS solutions from Kardex Remstar can integrate with host solutions including warehouse management systems, enterprise resource planning (ERP) systems, or returns management solutions so that the inventory information in the returns area stays in synch with inventory and returns data in host systems. This integration can be accomplished using standard interfaces with the help of the AS/RS provider. The inventory control software for the AS/RS also has built-in reports and information views for warehouse supervisors.

BENEFITS FOR PARTNERS SUCH AS RECYCLERS, OR RESELLERS/LIQUIDATORS: Working with a company that employs AS/RS for returns handling ensures that the operation always knows how much inventory it has on hand, and how that inventory is classified—thus making it easier to move or transfer goods in efficient quantities.

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