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2023 Reverse Logistics Automation Guide

A Vimaan eBook

KG Ganapathi - Craig Dowley - Cheryl Dee

What is Reverse Logistics?

Reverse logistics is the opposite flow of the supply chain, which entails goods moving from customers back to retailers, warehouses, and distribution centers (or in some cases from retailers to manufacturers). Like forward logistics, the supply chain network is utilized to recapture some form of financial value before the product lifecycle has come to an end and is no longer re-sellable.

Managing customer returns can be even more costly than forward logistics forcing companies to modify their ways of doing business:

- Some retailers have taken to the practice of allowing customers to keep the original items in addition to accepting replacements at no extra charge.

- As a means of preserving order margins, some retailers have started to charge small fees to facilitate returns.

- The complexities associated with reverse logistics have also forced some warehouses, distribution centers and retailers to outsource to companies with a specialty in processing returns.

The Reality of Customer Returns

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Handling customer returns is simply a part of doing business for retailers, but product return trends from **online purchases** have created significant strains on warehouses and distribution centers across the retail industry.

7-10% return rate
Average brick-and-mortar store return rate*

20 -30% return rate
Average online orders return rate*

Statistics obtained from the Retail Federation

Returns in the B2B Space

Returns in the B2B space, where items are shipped from a distribution center (DC) to a retailer or another business are not as high as the B2C or e-commerce space, but they are a significant problem, nonetheless. DCs frequently experience "chargebacks" or other forms of reverse logistics. The desire to maintain a strong customer relationship, combined with lack of traceability on customer claims makes it difficult for the warehouse operator to reliably implement methods to reduce returns. Sometimes, returns have an even higher cost:
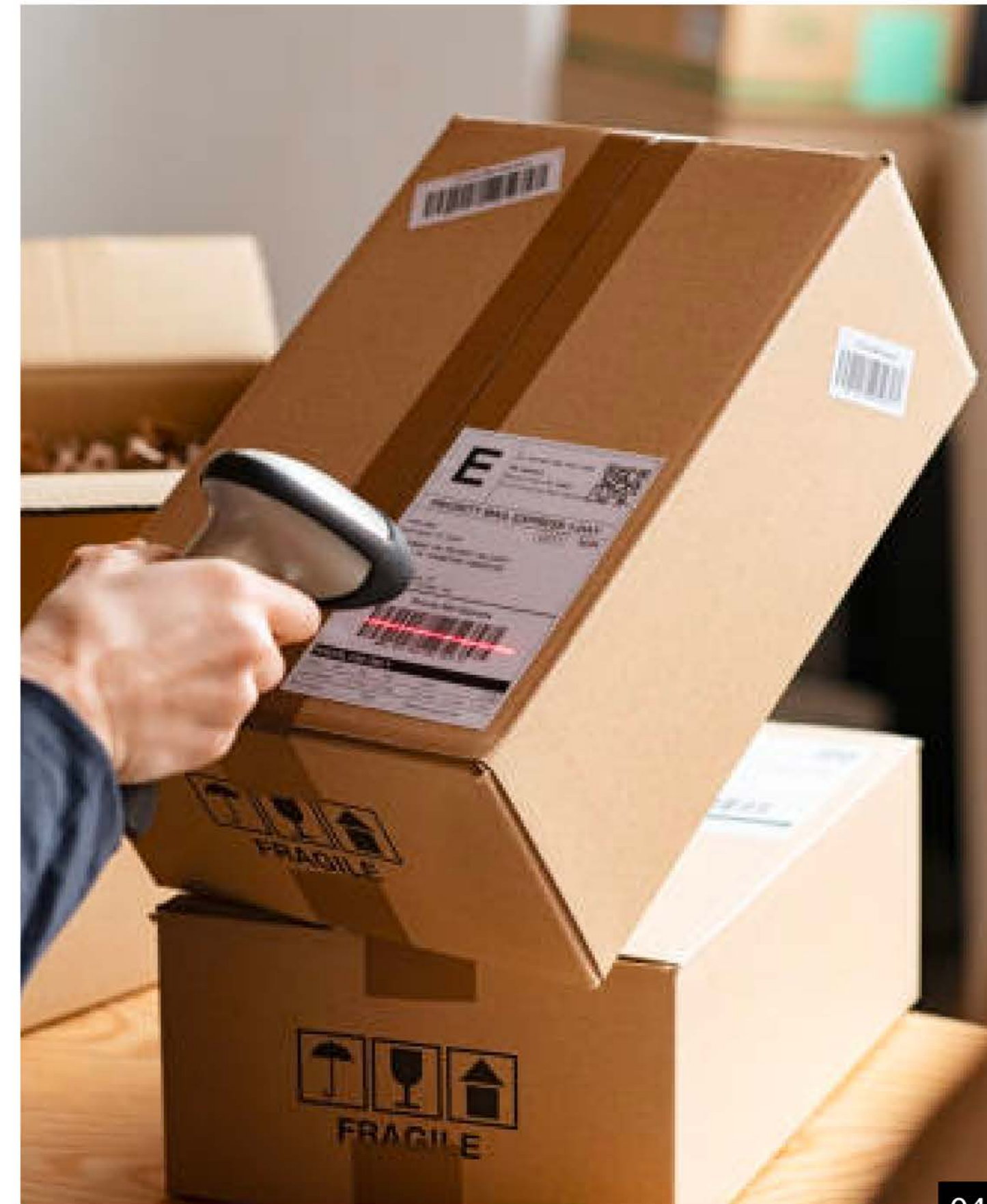
The pallets may have the wrong address label, which may be sent to the wrong location with the wrong customer information

The pallets could go to a wrong country that is under ITAR or other government restrictions

If pallets involve food, pharmaceuticals, or other perishable items, they need to be destroyed rather than shipped back

How Reverse Logistics Work

As compared to reverse logistics, traditional logistics (also known as forward logistics) is a straightforward process. Once a customer orders an item, the product is retrieved, packed and shipped to the customer. To better understand the process of reverse logistics, **consider the "5Rs":**

The 5 R's of Reverse Logistics

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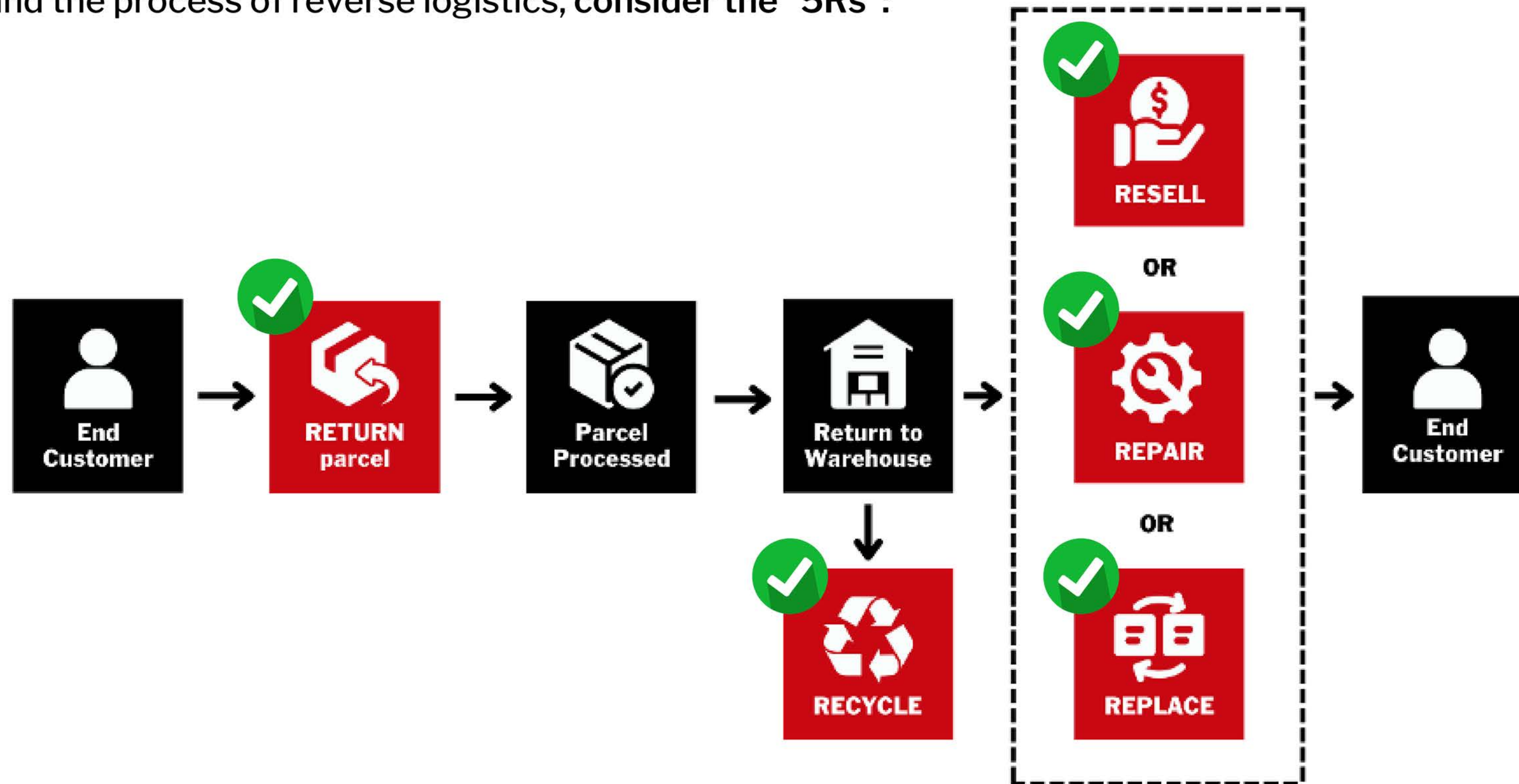
01

RETURN

Turnover inventory as quickly as possible

02

RECYCLE

Promote sustainability and go green

03

RESELL

Turn returns into revenue

04

REPAIR

Fix returns and return product to customer

05

REPLACE

Trade items for replacements

Reverse logistics is initiated after a customer has requested to make a return. Hence, this makes Returns the most prevalent "R". As previously covered, the ongoing surge of eCommerce has resulted in a spike of online purchase returns.

Returns are inevitable and are a result of many contributing factors. This makes it crucial for businesses to operate an efficient return system in place. Allowing retailers to reap in higher customer retention rates and stronger brand loyalty.

Return policies should be visible, simple, and upfront, ensuring there is no confusion to the consumer.

After receiving returned goods, most retailers prefer to resell the merchandise as quickly as possible. Typically, returned goods are still in their pristine condition which supports easier resale opportunities.

Retail Leader has reported the re-worn clothing space would grow to a market worth $64 billion, underscoring the enormous opportunity for businesses to recapture revenue in the secondary market.

However, this necessitates a solid and efficient reverse logistics strategy.

3 Repairs
The 5 R's of Reverse Logistics

Goods can get damaged while in-transit to customers, contributing to returned items. Damaged goods may undergo a repair process (either refurbishing or remanufacturing) to support resale opportunities.

To better the chance of reselling the repaired item, businesses often lower the price of the item and label the product as "reconditioned" (another important R).

If a return was due to errors during the order pick and packing process, a replacement would need to be fulfilled using reverse logistics. In this case, businesses will have to make a conscientious effort to follow up on why customers have returned the product to support order dispute resolutions.

More and more customers use solutions like PackVIEW from Vimaan to validate item validation during the order packing process. PackVIEW ensures the right SKUs and quantities are added to shipping containers, otherwise the order cannot be completed.

If the fulfillment center does not retain some sort of photographic archive of completed orders, then they are forced to accept fault. PackVIEW also provides this historical evidence for each order.

5 Recycle
The 5 R's of Reverse Logistics

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The ultimate goal of reverse logistics is to maximize the value of returning goods, but not merchandise is resell able or repair. Instead of disposing products to landfills, manufacturers have begun to leverage materials that are easily recycled for other products. Many manufacturers are now generating incremental revenue through forward thinking end-of-life recycling opportunities that either reuse parts or are easily broken down for future products.

Retailers, warehouses, and DCs all play a part in contributing to the use of biodegradable packaging and facilitating a recycling program for products. These steps help to paint a "greener" image helping to elevate brand reputations, while also supporting a cleaner environment.

Other Key Contributors to Reverse Logistics

Aside from the 5Rs, there are four factors contributing to customer returns that must be taken into consideration when devising your reverse logistics strategies and processes:

UNSOLD GOODS

Many companies face the common challenge of not being able to sell all stocked products. Unsold goods take up warehouse inventory space which is costly to everyone. With reverse logistics, warehouses deploy programs for unsold goods to be returned to manufacturers or distribution centers to free up space and reduce costs.

DELIVERY FAILURES

There are several reasons why a product cannot be delivered including incorrect shipping addresses or unavailable receipt signers ()for high valued items. In instances like these, reverse logistics enable customers to more effectively reschedule deliveries.

RENTALS

Rental/leasing is a business model which highly depends on reverse logistics. At the end of every lease, companies will need to come up with a system to collect back the leased product(s). The items can then be remarketed, recycled or redeployed for subsequent leases.

MAINTENANCE

Products such as consumer electronics or household appliances, require maintenance over their life time. By making use of reverse logistics, companies provide a return system which allows customers to easily send items back for maintenance in addition to having it returned upon completion.

Challenges of Reverse Logistics

The complexities of reverse logistics introduce a multitude of challenges companies need to address to ensure acceptable margins, customer service, and good corporate citizenship.

MANAGING COSTS INVOLVED

The perception of reverse logistics is that businesses lose money by processing returns. When brands implement more forward-thinking reverse logistics strategies and processes, they discover **incremental revenue streams** and opportunities to improve margins on returned items.

ADOPTING NEW PROCESSES

Over the past decade warehouses have embraced automation like no other time in history. Challenging labor markets and increased demands have forced warehouses and distribution centers to work smarter and reassess outdated practices and staffing models.

Advantages of Reverse Logistics

Establishing a sound reverse logistics strategy provides retailers, warehouses and distribution centers with many advantages.

PROFIT RETENTION

Reverse logistics help recapture some form of value from returned products. This allows businesses to retain some profits, instead of losing money from disposing/replacing all returned products.

INCREASED CUSTOMER SATISFACTION

Reverse logistics, empowers businesses to regain customer satisfaction by rectifying issues, helping build and maintain brand loyalty.
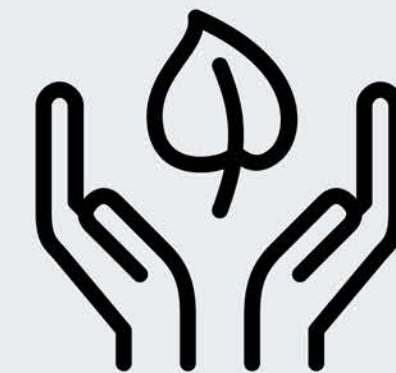
GREATER SUSTAINABILITY EFFORTS

Identifying useful materials to be reused for other products helps reduce overall waste. It also serves as an indicator of an environmentally conscious organization.

How Does Vimaan Automation Help?

The Vimaan suite of solutions improve inventory visibility, traceability and accuracy - striking at the heart of the reverse logistics problem. At all stages of the fulfilment process, Vimaan offers a solution that can not only track an order as it is being picked, packed or shipped, but it can also automatically, in near real time, validate that pick, pack or ship events against the database and catch errors *before* they occur.

As an added benefit, for every single event, Vimaan maintains easily searchable and retrievable archived images of an item as it goes through the fulfilment or return process, providing instant evidence against claims or chargebacks. Whether it is validating pallet contents for a B2B order or validating each item packing for eCommerce, Vimaan helps prevent returns before goods leave the warehouse.

70-80% DROP IN CLAIMS

experienced by Vimaan customers in most cases as a result of implementing our item tracking and validation solutions.

Real World Examples of how VIMAAN Helps with Reverse Logistics

Use Case 1: eCommerce Fulfilment
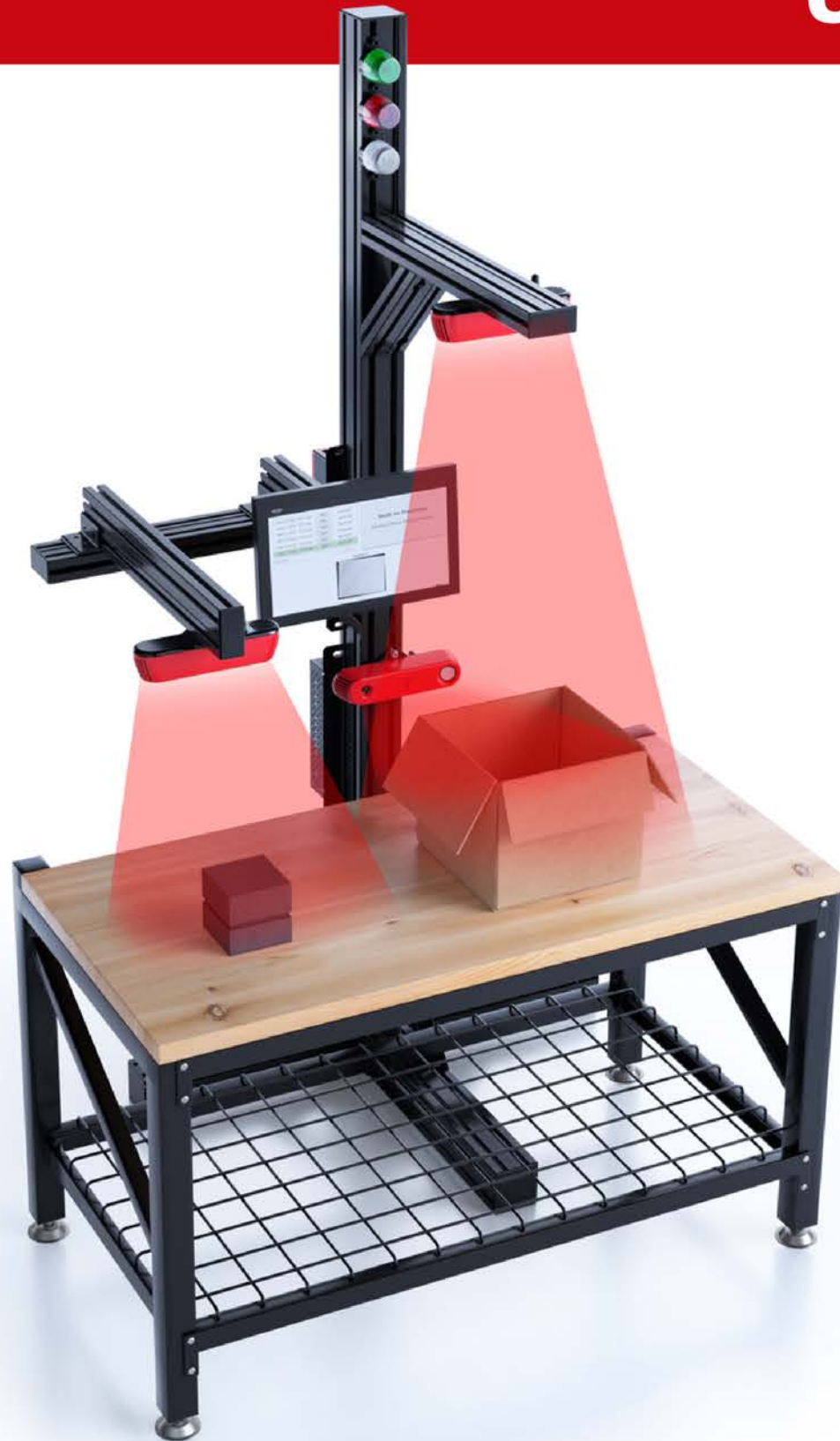
Order Validation
Outgoing "each" item orders are validated using PackVIEW, the Vimaan solution designed to provide hands free item and completeness verification during order packing

PackVIEW is a system of cameras and sensors installed at pack stations, and is designed to fit into existing outgoing packing workflows. The cameras and sensors are designed to read the labels on the outside of the packing box, scan and validate each item during packing. PackVIEW also captures and documents the contents of the packing container as it is being packed layer by layer.

Real World Examples of how VIMAAN Helps with Reverse Logistics

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01

The packing box itself is automatically scanned to ensure it has the right order number and the shipping labels on it

02

All items to fulfill the order are read and captured as they are being packed into the box, ensuring that order packers include the correct SKUs and quantities prior to shipping

03

All items in the order are digitally captured when inside the packing box and are archived to support future customer dispute resolutions

70% reduction in complaints

Order fulfillment complaints are reduced since quality issues were caught before the box was shipped to the customer. The archival data was also used for retraining of packing associates, and over time the quality issues caught during packing decreased as well as the associates followed better packing processes.

Time spent on resolving complaints reduced by 50%

Claims processing associates were easily able to retrieve images to demonstrate compliance.

Real World Examples of how VIMAAN Helps with Reverse Logistics

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Use Case 2: Manufacturing Uptime

A Vimaan customer runs a DC containing components and sub-systems that are used to feed a manufacturing line operating in "Just In Time" mode. Orders from the manufacturing line come in every day; they are fulfilled by picking cases to build pallets, and the pallets are trucked from outbound shipping. Frequent case quantity and LPN errors were causing the wrong parts to reach the manufacturing line, resulting in costly line stoppages.

DockTRACK Pallet solution was implemented at the outbound pallet staging lane, just prior to truck loading.

Real World Examples of how VIMAAN Helps with Reverse Logistics

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Use Case 2: Manufacturing Uptime

01
DockTRACK Pallet automatically scans case labels, from all five visible sides (all labels were outwardly visible as part of the natural workflow.)

02
The pallet naturally moves at its normal speed through the gate, and the information is captured by DockTRACK Pallet's sensors and cameras.

03
DockTRACK Pallet also connects directly to the customer's WMS and validates case LPNs and quantities against each master pallet LPN.

04
In the event of any discrepancy, an operator UI highlights the errors so that the pallet contents can be corrected immediately.

No changes to workflow required

Using DockTRACK Pallet, the customer has seen an immediate reduction in erroneous shipments.

Achieve Success with Vimaan

VIMAAN

Reduce the pain of reverse logistics with proven computer vision solutions that scan, inspect and track customer returns throughout your warehouses, and ensure that your WMS receives the most up to date and accurate data from within your four walls.

> 40%	**> 80%**	**100%**
REDUCTION RECEIVING AND AUDIT LABOR	**REDUCTION IN MIS-SHIPMENTS AND CLAIMS**	**INVENTORY LOCATION ACCURACY**

Start optimizing your reverse logistics processes with Vimaan and measure your ROI in MONTHS, not YEARS!

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THE TRUTH IS HERE

Warehouse Inventory Vision and Verification
Precise and actionable insights from receiving to shipping and every step in-between

Contact Us: sales@vimaan.ai

www. vimaan.ai