

RETURNS OPTIMIZATION PLATFORMS

THE SOLUTION RETAILERS NEED TO IMPROVE RETURNS PROCESSING

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INTRODUCTION

Leading brands are embracing Returns Optimization Platforms (ROPs) as a new way to improve reverse logistics and capture value from distressed inventory. ROPs span the entire reverse logistics lifecycle and help create more value from returned and excess inventory while removing cost from the supply chain. Finding the right technical solution is essential to increasing inventory recovery and velocity, reducing warehouse costs, and increasing visibility within the reverse logistics lifecycle.

What are Returns Optimization Platforms? What specific types of value do these platforms deliver? And what is required to create and implement one? This paper addresses these questions through an examination of this new type of technology embraced by leading retailers and consumer brands.

THE CHALLENGE OF CONSUMER RETURNS

Returns processing is messy and unpredictable. Product comes back in a variety of conditions and in unpredictable waves. Some items arrive in the original box, but most arrive in whatever packaging was available at the time. Sometimes a return includes a return authorization ("RA" or "RMA"), but other times it does not. Even if the item does have a return authorization, what's inside the box might not match what's on the RA. These unpredictable details in reverse logistics have created complexity that is difficult for most retailers and manufacturers to handle.

Traditionally, brands have taken a "brute force" approach to reverse logistics management. They return as much inventory as possible to stock, liquidate as much of the remainder as they can, and then try to dispose of the rest in the least burdensome way. They make these routing decisions by creating rules that dictate the disposition of inventory at the product level. For example, a retailer may require that all laptops of a certain model get sent to a bulk distributor, while all t-shirts of a certain style get donated. These rules are designed to optimize the net recovery--the difference between the sale price and handling cost--for each item, and take into account the cost of shipping, the secondary market price, and other factors.

But what happens when market conditions change? What happens when secondarymarket prices go up or down, or when the condition of returned product varies? When brands use static, rule-based systems to govern disposition—combined with warehouse management systems designed primarily for forward movement—they leave tremendous value on the table.

As a result, leading retailers and manufacturers look for software solutions that can help them get ahead of the changing market landscape. Forward looking businesses are looking for solutions that can determine item disposition in real time and provide a feedback loop of information and insight, all while maximizing warehouse throughput with purpose-built systems known as Returns Optimization Platforms ("ROPs").

THE VALUE OF RETURNS OPTIMIZATION PLATFORMS



LEADING RETAILERS AND MANUFACTURERS USE RETURNS OPTIMIZATION PLATFORMS TO DELIVER FOUR KEY AREAS OF VALUE:

01 HOLISTIC PROCESSING COST REDUCTION

The unpredictable volume and variance of inventory in reverse supply chains complicates supply chain design and makes standard handling processes difficult to implement. Physical stores are a great example of this trend. Inconsistent handling of returns in stores can result in lost or damaged inventory which can put a huge burden on operations. Because of these realities, per-item processing costs in reverse logistics are traditionally very high and often prohibit utilization of the best disposition channels. Leading brands, however, are using ROPs not only to create more top-line value from inventory and gain visibility, but also to reduce processing costs. These cost savings typically come from more streamlined workflows and handling processes across multiple segments of the reverse supply chain.

02 ACHIEVING HIGHER PROFITABILITY ON DISTRESSED INVENTORY

When an item enters the reverse supply chain, a brand's objective becomes finding a way to turn that item into value. Often this involves sending the item back to a shelf (either in-store or online), or sending it back to a vendor. Getting an item back into the best channel as quickly as possible helps to avoid value depreciation and allows a retailer to sell at a higher margin. However, when those options are unavailable, brands rely on traditional bulk liquidation or direct-to-consumer remarketing in limited scenarios. With ROPs, leading brands are able to achieve higher recovery by using the first touch to disposition inventory to higher-recovery channels that were previously unavailable.

03 INCREASING SUPPLY CHAIN VISIBILITY

One problem with existing liquidation is that retailers and manufacturers lack data they can use to understand and improve performance. This includes information on the location and condition of on-hand inventory, as well as information on the return reason, recovery amount and final disposition path of each item. By using ROPs to capture data, brands can begin to understand trends in distressed inventory and remediation tactics, focusing on what works and treating causes instead of triaging symptoms.

04 DELIVERING CONTROL AND FLEXIBILITY TO BUSINESS OWNERS

Business needs are never predictable, and what works in one month or quarter may not be what is required in the next. Many brands struggle with systems and providers that supply a fixed approach and do not offer the flexibility needed to adapt to changing business conditions. With Returns Optimization Platforms, brands can adjust the mix and nuance of tactics to ensure they are always meeting their business requirements.

The responsibility for these activities may not necessarily fall under a single department, but this is not an issue because the benefits ROPs provide are fundamentally cross-functional. Leading brands have demonstrated that the breadth of an ROP enables it to deliver value across the spectrum, pulling from various components of the merchandising and supply chain processes to create more value than is achievable through disparate technology. A Returns Optimization Platform therefore becomes a powerful tool to maximize inventory value, create a cohesive customer experience, and prepare an organization for long-term success.

THE COMPONENTS OF ROPS

At the heart of an ROP is the ability to direct returned and excess inventory to the proper channel by considering a variety of cost, profit, and rule inputs. In order to do that correctly, ROPs must address all aspects of the reverse logistics product lifecycle, from the moment a product gets returned to the final disposition of that product.



COMPREHENSIVE ROPS THEREFORE HAVE FIVE PRIMARY COMPONENTS:

01 RETURN **INITIATION SUPPORT**

Software that enables the systematic tracking and processing of returns from the moment they enter the system.

02 AUTOMATED 03 PURPOSE DISPOSITION ROUTING

Recommendations based on data-driven decision science to correctly route inventory to its optimal destination.

-BUILT **OPERATIONAL** TOOLS

System-driven supply chain software to streamline returns processing under all circumstances.

DISPOSITION CHANNELS

Established connections for the sale or disposal of a unit outside of the inventory flow.

04 INTEGRATED 05 ENTERPRISE VISIBILITY

The data feedback system that is used to understand the RL ecosystem and make informed decisions.

IN THIS SECTION, WE EXPLORE EACH OF THESE KEY COMPONENTS OF A RETURNS OPTIMIZATION PLATFORM IN MORE DETAIL.

01 RETURN INITIATION SUPPORT

The most important moment in reverse logistics is the moment of a return. It is the strongest touchpoint with the end consumer, and represents the time at which the item has the most value to be recovered and has had the least cost invested in it. It is key to support the moment of return correctly to leverage these benefits and to provide a consistent experience across all return locations. This includes software that runs in retail store environments, in call centers, on consumer-facing websites, and in other locations.

SPECIFIC COMPONENTS OF A ROP'S RETURN INITIATION SUPPORT INCLUDE:

01 DATA INGESTOR

An ROP makes it easy to ingest data about the item being returned, whether that be through an integration or API to a product catalog, and matches it with historical data to prepare it for further routing.

02 USER WORKFLOW GUIDANCE

Advanced ROPs have interfaces and features that are built specifically to suit a retail store environment and optimize the overall returns experience from the customer perspective.

03 SHIPPING RATE OPTIMIZER

ROP software can be used to determine the ideal shipping method for an item based on where the system determines an item should be routed. This automated disposition routing is another powerful feature of ROPs discussed in the next section.

02 AUTOMATED DISPOSITION ROUTING

Once a return has been entered into the system, the next step in a typical reverse logistics process is to decide where it should be routed. This decision is critical because each routing decision directly influences the amount of labor, transportation, and effort that will go into processing the item. ROPs with automated disposition routing can use data science to route each item in the most cost effective way.

Effective inventory routing requires rapid parsing of available data to decide on the right place to send an item. ROPs can aggregate historical returns data and act intelligently on that data to help retailers optimize disposition routing, effectively maximizing profitability and reducing cost.

SPECIFIC COMPONENTS OF A ROP'S AUTOMATED DISPOSITION ROUTING INCLUDE:

01 VALUE ANALYZER

ROPs must be able to evaluate the previous performance of similar inventory through the reverse logistics life cycle in order to automatically calculate the highest yield across all potential channels. This analysis is synthesized from the resulting performance of the existing disposition channels. Because product performance often varies by product condition, ROPs must also be able to parse product data by condition to determine outcomes and adjust pricing accordingly.

02 VELOCITY OPTIMIZER

In addition to value, velocity is another important factor to consider for distressed inventory. Inventory that is not optimized for velocity will depreciate in value unnecessarily. ROPs should be able to find the balance point between velocity and desired recovery.

03 DISPOSITION CRITERIA MAPPER

Advanced ROPs enable retailers and consumer brands to set and continually adjust a variety of criteria to meet recovery and velocity targets specific to their businesses. The automated disposition routing function of many ROPs learns from disposition input and adjusts over time.

03 PURPOSE-BUILT OPERATIONAL TOOLS

After selecting the optimal route for a unit, ROPs should then guide the unit through the remainder of the reverse logistic process. It is essential to have a unified software system that guides decision-making upstream at the point of return and also within the warehouse consolidation nodes. One unified platform for all inventory touchpoints increases visibility across the system and minimizes latency. ROPs will also include functionality similar to what is included in a traditional Warehouse Management System (WMS).

SPECIFIC COMPONENTS OF A ROP'S PURPOSE-BUILT OPERATIONAL TOOLS INCLUDE:

UNIFIED SYSTEMS 01 ACROSS ALL FACILITIES

ROPs must be able to handle the mix of insourced and outsourced processing and data as well as transient labor among situational considerations while keeping operations consistent across the facilities.

INTUITIVE 02 WORKFLOWS AND PROCESSES

ROPs should work to streamline handling returned inventory and should make basic warehouse functions like receiving, test and grade, directed sort, and other processes as easy as possible.

03 UNIT-LEVEL LPS

License plating ("LP") is an industry standard way to systematically tag an item with a trackable identifier. Because of the diversity of inventory in the reverse supply chain, unitlevel license plating is necessary to provide a workable level of visibility for gathering data about an item as it passes through the supply chain and enters the marketplace. Unit LPs carry the double advantage of providing granular data about the supply chain as well as inventory management.

04 INTEGRATED DISPOSITION CHANNELS

There are many options that exist for dealing with distressed inventory that is not a good fit for primary selling channels. Distressed inventory can be sold on secondary marketplaces directly to consumers, liquidated in bulk, returned to vendors where return rights exist, or donated or recycled if it is not in sellable condition at all. However, with such a wide array of choices available, technology like ROPs and dispositioning engines can help to allocate inventory to the right channels, if these channels exist. A major function of ROPs is integrating inventory into all available channels and creating new channels if the optimal channel mix is not currently available. This function is a major profit center of an ROP, essential to improving profitability.

SPECIFIC COMPONENTS OF A ROP'S INTEGRATED DISPOSITION CHANNELS INCLUDE:

01 INTEGRATION INTO ALL CLIENT-OWNED CHANNELS

Any third party system installed to manage reverse logistics should also be able to integrate with and leverage clientowned channels automatically without human intervention to maximize the ability to sell inventory without increasing labor.

02 AUTOMATED PRICING FOR SECONDARY MARKETPLACES

To eliminate lag time for selling inventory on secondary marketplaces, ROPs should also include automated pricing using historical data to adjust inventory to the right selling price, especially if these channels are not owned by the client.

SIMULTANEOUS 03 LISTING ACROSS CHANNELS

The ability to list items simultaneously across channels without the threat of overselling enables retailers to sell through inventory much faster than was previously possible by multiplying market reach.

04 AUTOMATED, NO-TOUCH REALLOCATION OF INVENTORY

Traditional remarketing systems often incur costs by requiring manual movement of inventory to different channels when items fail to sell on one marketplace and get listed on another. An advanced ROP removes that cost by reallocating inventory between channels or workflows without needing an additional touch on the box, therefore increasing the item's recovery.

05 ENTERPRISE DATA VISIBILITY

One problem with basic reverse logistics management is that retailers and manufacturers lack data they can use to understand and improve their performance. This includes information on the location and condition of on-hand inventory, as well as information on the reason for return. Advanced ROP software not only captures this data but also presents this information back to users so they can begin to understand trends and remediation tactics.

SPECIFIC COMPONENTS OF A ROP'S ENTERPRISE DATA VISIBILITY INCLUDE:

Since many retailers and manufacturers use ROPs as the "system of record" for reverse logistics, these systems **BUILT-IN** must include built-in dashboards and reports that provide 01 VISIBILITY information on the status of all inventory under management. REPORTING This includes on-hand reports, aged inventory reports, and a variety of other information. In addition to providing reporting on inventory performance 02 IN-DEPTH RL and location, ROPs can provide analytics and insights based on that inventory. For example, ROPs can be used to improve **ANALYTICS** sell-through rates, boost inventory recovery, and bolster process efficiency DATA WAREHOUSE

03 DATA WAREHOUSE AND BUSINESS INTELLIGENCE (BI) INTEGRATION

A ROP aggregates product data, sources new data from consumers, and generates valuable insights. By integrating this data with existing operational systems and making it available for ad hoc analysis, brands can generate new sources of business value. As a result, these systems must be compatible with various off-the-shelf BI and data warehouse applications.

By providing this level of visibility and reporting, ROPs allow those who manage the reverse logistics network to focus on what works, triage what does not, and continuously improve performance across the entire reverse logistics network.

SUCCESSFUL ROPs IMPLEMENTATIONS

MANY LEADING RETAILERS AND BRANDS ARE ALREADY USING ROPS TO IMPROVE THEIR PROCESSES AROUND MANAGING RETURNED AND EXCESS INVENTORY.

CASE STUDY: STORE RETURNS PROCESSING & CONSOLIDATION

One \$8B office supply retailer had been managing returns across many disparate systems in different parts of the supply chain.

This retailer had one technology in its warehouses and a different technology at its physical stores, causing problems in managing inventory. In addition, returned inventory would sit in retail store back rooms for months, aging out of forward stock and rapidly depreciating to the point that the retailer could not recover any value for the inventory. To speed up the processing of returned inventory while also reducing costs and increasing the profitability of returned and excess inventory, the retailer wanted one system to manage all returns.

Using an ROP, the retailer now gets inventory into its system at the moment of return in store and can track that inventory throughout its journey in the supply chain up until it is put back in forward demand channels. The retailer sends returned items from its stores to a managed warehouse facility that uses this ROP solution. As a result of this initiative, this retailer has seen both a \$20M+ increase in profitability and more efficient automated vendor agreement processing, which has allowed the retailer to cut the cycle time for returned inventory in half.



CASE STUDY: CONSOLIDATE ALL REVERSE LOGISTICS PROCESSING

A \$2B+ e-commerce retailer was under pressure to increase net recovery from returned, excess, and undeliverable inventory. This retailer had been outsourcing their existing reverse logistics program to a legacy reverse logistics provider who was only helping the retailer liquidate massive amounts of inventory through wholesale bulk liquidation channels. This retailer did not have a system in place to take advantage of established return to vendor agreements, nor could the retailer access direct-to-consumer secondary markets or return inventory to its primary stock. As a result, the retailer was treating all inventory the same way and leaving a tremendous amount of value on the table.

This e-commerce retailer wanted to consolidate all its reverse logistics processing under a single solution that was capable of expanding the breadth of disposition options for each item. For the retailer, this included management of consumer returns, excess inventory, Return to Vendor (RTV) rights, and undeliverable product. This retailer ultimately decided to deploy an ROP solution within their existing warehouse facility and developed the returns process to drive a \$10M+ increase in profitability, a 67% reduction in processing time for RTV, and an almost 50% reduction in environmental waste.



HOW TO ADOPT AN ROP

As leading retailers continue to show progress by utilizing ROPs as the solution of choice, we anticipate the demand for these systems will continue to grow. For many retailers, that process will include a build/ buy/partner analysis to determine the best way to obtain organization specific ROP benefits.

For retailers and brands who have invested in in-house technology teams as a competitive market advantage, the best option may be to build a custom, homegrown ROP. For others who may not have the same approach or resources to dedicate to technology development, there are many vendors that now offer ROP solutions through licensing fees.

The most determinant characteristic of success in the Reverse Logistics space is always the dedication of resources. The presence of a dedicated team or group focused on reverse logistics can make it much easier to petition leadership for funding or to get organizational buy-in for initiatives. In the absences of these resources, however, it may be worth implementing through a third party or leaning on a partner to provide the impetus for adoption.

CONCLUSION

Retailers and manufacturers desire to capture savings throughout their entire supply chain through returns management, which has increased the importance of reverse logistics. For many of these retailers, adopting ROPs software is the preferred method for dealing with these nuances. While the particular features and requirements of each ROP may be different, most leading retailers and manufacturers are investing in systems that can power not only a physical return center, but can also drive reverse logistics visibility, inventory recovery, and inventory velocity across an entire reverse logistics network. Perhaps most important, these brands are investing in ROPs that offer them the control and flexibility required to meet their individual and unique business needs.

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ABOUT OPTORO

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Follow us on Twitter @optoroinc Optoro, Inc. is a technology company that is transforming the way retailers process, manage, and sell their returned and excess inventory. Through comprehensive, worldclass data analytics, Optoro's software platform determines the best path for returned and excess goods, maximizing recovery value, enabling consumers to get great deals, and reducing environmental waste.