

Moving forward in reverse

Why reverse logistics needs a dedicated channel



Reverse logistics, the process of returning goods from customers to a retail or manufacturing source, is an increasingly important, yet often undermanaged business function. Returns represent a growing cost of doing business today, and they present unique challenges that are separate from traditional forward-moving distribution channels. For this reason, attempting to manage reverse logistics through forward logistics channels can be costly and increase complexity.

A dedicated reverse logistics channel is a practical alternative that can contribute to both revenues and margins. It's possible to transform existing reverse logistics functions from cost centers to profit centers by making effective strategic decisions.

How return logistics can clog organizational arteries

An estimated 20 percent of goods sold in the United States are eventually returned to their manufacturers, at a cost of \$100 billion annually.

As direct-to-consumer channels continue to grow, the magnitude of the returns challenge will only increase. And products recalled for safety reasons continue to inflate these numbers. In the fourth quarter of 2012, U.S. Food and Drug Administration Enforcement Reports recalled 314 medical devices, up from 106 in the fourth quarter of 2011.¹

¹ <http://www.expertrecall.com/recallindex/>

Many companies attempt to manage reverse logistics through their forward logistics channels, believing that it is most economical to leverage existing warehousing and transportation networks. However, for certain industries, attempting to manage forward and reverse logistics through the same channel can increase operational complexity and cause negative ripples across the value chain. The human cardiovascular system serves as an apt analogy: It's as if de-oxygenated blood were returned to the heart through the same arteries that carry oxygenated blood throughout the human body, rather than through separate and highly specialized veins. Indeed, a company's products can be viewed as its life blood. Forcing a reverse flow back through the forward channel is akin to clogging the arteries.

Returns processed through a shared logistics channel can negatively affect many aspects of the business, including:

- **Customer loyalty:** Customer experience and brand perception begin before purchase and extend through return and repair. It follows then that the customer experience when returning a product is just as important as the buying and support experiences. A customer who has an efficient, expedited return service experience may be more likely to remain loyal to the brand than one who has a negative experience.




- **Profitability:** It's a given that returned products equal revenue losses. But returns also can significantly shrink profit margins.
- **Infrastructure:** Processing returns through regular forward distribution and service centers slows the delivery process – i.e., forward movement – for first-sale products. This is a problem because the longer it takes for products to flow to points of sale, the greater the risk of lost sales through stock outs or customer abandonment of shopping carts, both physical and virtual. Returns also place burdens on infrastructure such as warehouse space where they can take up as much as 25 percent of total available space due to low turns of refurbished products.
- **Product value:** Products that evolve swiftly, such as electronics, lose value over time. The slower the returns process, the greater the chance that resale value of products will decline. Product value can also erode due to damage incurred through a poorly designed returns-handling process.
- **Regulatory compliance:** Because regulatory requirements can change quickly, delays in the return process may create compliance exposure for a company. Also, returns can increase a company's environmental impact if managed in an ad-hoc manner, not only adding costs but also creating potential reputational risks.

Return logistics challenges – a closer look at three industries

Many industries today have complex reverse flow operations (see Figure 1). On average, manufacturers spend 9 percent to 15 percent of total revenue on returns,² but three industries in particular have a higher proportion of returned goods: automotive, consumer and household electronics, and medical devices. A closer look at challenges across these industries shows how having a dedicated reverse channel is critical for transforming the reverse supply chain function into a profit center.

Reverse flow management

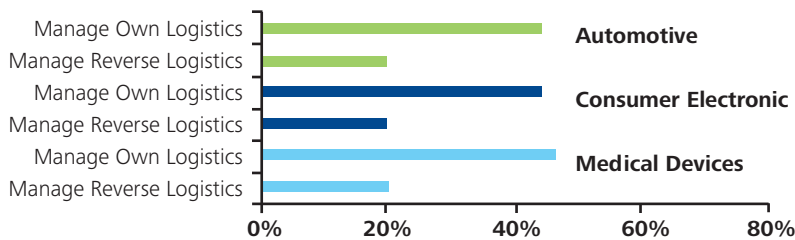
Figure 1: Industries with complex reverse flow operations

	Automotive	Consumer Electronics	Medical Devices
What is being moved?			
Volume of flow (in the US)	Annual Returns -\$5.7B ⁵	Annual Returns -\$14B ⁷	Annual Returns Growth Rate -\$23% ⁹

² Curtis Greve and Jerry Davis: "Recovering Lost Profits by Improving Reverse Logistics"; UPS; Mar 2012

Interviews with subject matter advisors reveal that almost 50 percent of surveyed companies across the automotive, consumer electronics, and medical devices industries manage their own logistics. However, only 20 percent of respondents have dedicated reverse supply chain channels (see Figure 2).

Figure 2: Companies with dedicated reverse supply chain ³



Close to 50 percent of surveyed companies across automotive, consumer electronics, and medical devices industries manage their own logistics but only 20 percent of respondents have a dedicated reverse supply chain channel.

Automotive industry



The automotive industry's supply chains are among the world's most complicated.⁵ With an ever-growing number of stock keeping units (SKUs) and a multistep supply chain, the physical, financial, and information flows within the industry are increasingly complex and difficult to manage.

The automotive industry also sells some of the world's most expensive consumer goods, which translate into U.S. \$5.7 billion in returns every year, on average. Key challenges this industry faces include:

- High refurbish and disposal costs
- Lack of accountability for returned goods
- High percentage of "no warranty found" claims
- Limited visibility into reasons for returns

To address these challenges, automotive firms should consider adopting standardized approaches to managing returns, dedicating resources to the returns function, and aligning returns goals and metrics with their overall business strategies.

Consumer and household electronics industry



Within the consumer goods industry as a whole, products and parts can be returned for refurbishment, repair, remanufacture, or disposal through multiple channels for a broad range of reasons, and they can be in varying condition. Because of this, most consumer goods manufacturers and their channel partners struggle to triage and appropriately manage returns.⁵

The consumer and household electronics sector alone spends more than U.S. \$14 billion on returns every year.⁶ Without a well-managed, dedicated reverse channel, electronics manufacturers could be losing more than 50 percent of the value of returned inventory, since the majority of it can only be sold in secondary markets.⁷

³ Reverse Logistics Deloitte Practitioner Survey. May 2013. Online

⁴ Inmar Reverse Logistics: "Automotive Aftermarket Reverse Logistics Opportunities Special Report"; MEMA MIS Council; October 2009

⁵ "Industry Best Practices in Reverse Logistics": Aberdeen Group Inc.; Jan 2007

Key challenges that these companies face include:

- Inventory obsolescence making speedy return cycle time an imperative
- Increasing government regulation of electronics disposal

To manage their reverse supply chains effectively, electronics manufacturers should consider establishing automated reconciliation processes, improving inventory accuracy, and using effective incentives for consumers and channel partners to return products and parts in a timely manner.

Medical devices industry



Companies in this industry try to minimize downtime due to the critical nature of the equipment they service. They also try to optimize the inventory of service parts and use a triaging process to put required parts back into the supply chain. Returns in this industry are growing at a rate of 23 percent annually.⁶ Because of these factors, medical device manufacturers can benefit from a dedicated reverse channel and clearly defined processes for reverse logistics. Some of the key challenges that these firms face are:

- Ineffective inventory management and triaging processes
- High percentage of returns due to equipment complexity
- Varying machine technology and usage by geography

These businesses can benefit from clear accountability, executive support, and efficient triaging processes to help them manage returns effectively.

Potential benefits to be gained

Many supply chain executives choose to focus on forward supply chains because they have a more substantive impact on the bottom line. However, in doing so, they may disregard benefits to be gained by improving the reverse supply chain. With more than 10 percent of revenues spent on reverse logistics costs,⁹ it is imperative for executives to refocus their efforts on this issue. In addition

to margin improvements, effective returns management can enhance a firm's brand equity and its reputation for acting in environmentally responsible ways.

A dedicated channel for reverse logistics gives manufacturers clear visibility into reverse flows. It also enables tighter cost controls. Most significantly, it can transform reverse logistics functions from cost centers into profit centers due to enhanced asset efficiency, greater employee productivity, and clear organizational goals. Also, the speed of reverse flow improves, minimizing the loss of value for products that tend to devalue quickly (for example, consumer electronics). Additionally, forward logistics channels are freed up to increase speed of delivery and focus on improving customer service while balancing other supply chain pressures such as supply variability.

A dedicated channel for reverse logistics is the first step to converting returns from a cost center to a profit center.

Companies may also improve other functional areas (see Figure 3), including:

- **Remarketing:** targeting select customer segments for resale of returned products
- **Contract and warranty management:** leveraging effective practices for contract and warranty management
- **Effective gate keeping of returns:** screening and cataloging returned goods at the point of entry in the reverse flow
- **Cost management:** monitoring manufacturing, transportation, and distribution costs specific to returns

⁶ Curtis Greve and Jerry Davis: "Recovering Lost Profits by Improving Reverse Logistics"; UPS; Mar 2012

⁷ Curtis Greve and Jerry Davis: "Recovering Lost Profits by Improving Reverse Logistics"; UPS; Mar 2012

⁸ "Industry Best Practices in Reverse Logistics"; Aberdeen Group Inc.; Jan 2007

⁹ Ashutosh Agrawal: "Turn Your Reverse Supply Chain into a Profit Center"; CSCMP Supply Chain Quarterly; Q1 2012

- **Refurbish- and repair-friendly product design:** more easily recovering, refurbishing, and reusing returned products
- **Minimizing incoming returns:** gaining tighter control of the returns business and adopting effective practices to reduce incoming returns

A dedicated reverse logistics channel can improve the velocity of products and reduce complexity of the supply chain. Such results can help improve profitability due to increased revenues and decreased costs, while helping the company maintain its brand image and improve customer satisfaction.

Practical considerations for decision making

Strategic choices are imperative to setting up an effective returns management process while still addressing the tradeoffs for and impacts on current business processes. By assessing organizational capabilities and goals, decision makers can select an appropriate approach (whether the reverse logistics function is a cost center or a profit center), disposition method (dispose, discount sale, recycle, or refurbish), network model (centralized versus decentralized; open loop versus closed loop) and execution plan (in-house versus outsourced).

Cost versus profit center

Whether the dedicated reverse logistics channel is a cost or profit center will impact the way a company implements it. Profit centers typically focus on revenue generation through repairs and resale of refurbished products, and they require tight controls of the costs for the return-and-repair processes. Cost centers, on the other hand, focus on improving the customer experience and segment customers based on desired service levels.

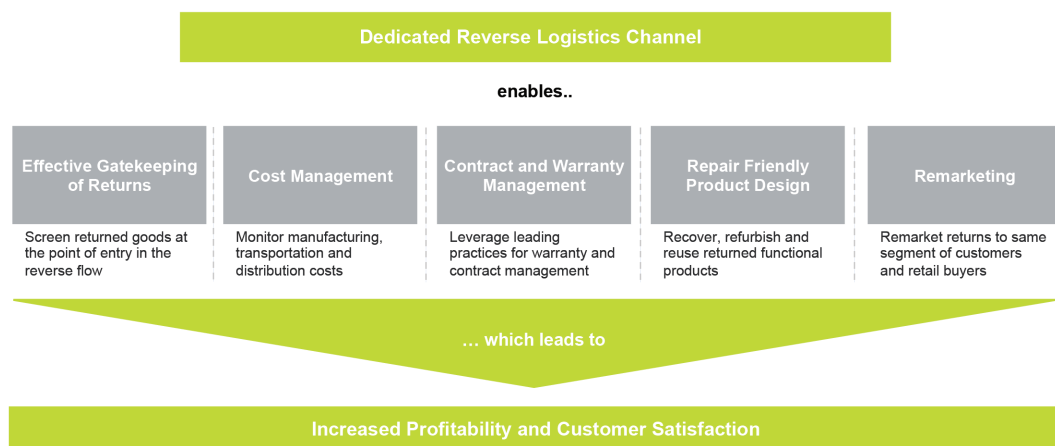
Disposition methods

Companies can benefit from defining rules, typically by product category, to decide on the course of action when a product enters the reverse channel. Disposition choices can include:

- Dispose
- Discount sale
- Recycle or reuse
- Repair or refurbish

Figure 3: Potential benefits of a dedicated channel

A dedicated reverse logistics channel improves velocity of products and reduces complexity of the supply chain resulting in improved profitability



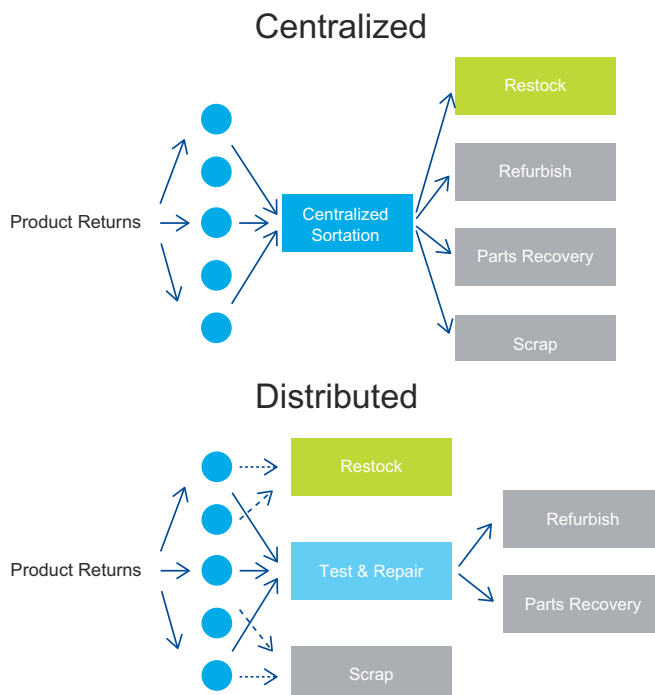
- Clear visibility to reverse flows enables tighter cost controls and supports profit maximization goal
- Forward logistics channel is freed up to increase velocity and to focus on high customer service while balancing other supply chain pressures such as supply variability
- Asset efficiency and labor productivity improves due to clear demarcation of flows and hence clear organizational goals and capabilities development
- Velocity will improve for reverse flow providing tighter control over loss of value for products that lose value quickly, e.g. consumer electronics

Network model

The network model that a manufacturer chooses will depend on industry and geographic considerations. The first decision is between a centralized and a decentralized approach (see Figure 4). Factors to consider here include:

- Product lifecycle
- Product value and cost
- Volume and geographic distribution of returns

Figure 4: Centralized vs. distributed network models



The second network decision is to choose between a closed loop and open loop approach. Closed loop networks are responsible for the entire reverse logistics process, including reuse of the recovered material. Open loop networks are responsible only for collecting and sorting products, not reuse.

In-house versus outsourced reverse channel

Managing a successful dedicated reverse logistics channel requires a rigorous implementation of processes supported by robust tools. Critical processes to set up include authorization, receipt, processing and execution. Businesses should set up clear return policies and returns

materials authorization (RMA) to clarify the returns authorization process. Processes and tools are required for the transportation, receipt and screening of returns to reconcile with RMA. Once screening is complete, businesses need to inspect the returned product and decide upon the best strategic course of action (dispose, discount sale, recycle, repair or refurbish). The last step is to execute the strategic choice in an efficient and profitable manner. Robust tools in the form of a returns and records management system, warranty management system and transportation management system will help implement the processes.

Depending on existing personnel skills, the maturity of the reverse logistics process, and cost, organizations may choose to outsource the reverse channel to third-party logistics (3PL) providers – either the complete process or selected segments (for example, transportation or sorting). An outsourced model would require careful selection of the 3PL partner based on capabilities, proven track record, and alignment of services with the outsourcing company's objectives and strategies.

Dedicated reverse logistics channel – a new growth path

Businesses today are looking to grow in a number of different ways, whether through acquisitions, increased product offerings, and expanded sales channels and geographies. Growth by any of these means can lead not only to increasingly complex operations, but also a higher rate or volume of returns.

The instinct of supply chain executives may be to consider increasing returns purely in a negative light and to seek out and address the root causes of them. However, higher returns could actually represent a “new normal” for a growing company – one in which a higher percentage of sales inevitably results in returns. Viewed in this light, returns management through a dedicated reverse logistics channel becomes a fundamental aspect of doing business with its own set of costs, enabling a business to turn what was previously considered pure “noise” and expense into competitive advantage.

A dedicated reverse logistics channel can drive significant business value, potentially reducing the cost of handling returns by 15 to 20 percent and increasing revenues by 5 to 10 percent.¹⁰ As businesses seek new ways to gain competitive advantage, the often-overlooked returns function can be a practical source of cost-cutting and revenue generation.

¹⁰ Figures based on Deloitte Consulting LLP data and client experience.

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