White Paper

Self-Service Reverse Logistics with SAP Hybris and Custom Development

softcrylic

Abstract

Reverse logistics stands for all operations related to the reuse of products and materials. It is the process of moving returned goods from their original delivery point for the purpose of capturing value or proper disposal.

Studies show that an inefficient Reverse Logistics process may be costing U.S. businesses as much as $260 Billion per year [1]. This is huge in the B2B and B2C brick and mortar, and e-commerce domain that is characterized by shrinking margins, extreme competition, and increasing regulatory compliances.

Every business is unique in the way it operates, and so does its corresponding reverse logistics solutions. Even today many businesses rely on offline registers, excel spreadsheets, contact centers, or stand-alone automation systems to handle their returned goods. There is money to be made in the "returns" business, but Reverse Logistics is still in its nascent stage. It has to be tailored to fit the unique return handling requirements of each business. However, as the number of returns is hiking, more businesses are beginning to adopt off-the-shelf, SaaS-based supply chain management systems that partially handle reverse logistics.

A blended automation approach is proposed as the way forward to manage this cumbersome process to swiftly return value to customers while simultaneously, extracting value from the returned goods for vendors.

This white paper examines the business drivers behind implementing a foolproof reverse logistics solution, the challenges involved in introducing automated systems, and how Softcrylic helped one of the leading e-retailers who uses SAP Hybris with a custom API Integration to handle their unique reverse logistics process. The implementation was completed within 4 Months that led to 400% reduction from their typical returns handling time.

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Introduction

The need for a sophisticated Returns Management Solution begins with the fact that in 2016, up to 9% of all store-ordered products and 30% of all e-commerce-ordered products were returned to vendors.[2]

Furthermore, studies show that US companies alone lost up to $260B[3] in handling reverse logistics management in 2015.

In today's consumer economy, businesses treat customer orders and customer returns with equal importance. In fact, no-questions-asked return policy is one of the key features for delivering superior shopping experience among offering new brand experiences, high customer service, establishing customer relationship or others.

Although merchandise returns have always been a part of consumer business, exponential growth in online purchases and evolving needs of customers ("if I don't like it I can easily return it") make reverse logistics an integral, routine part of the e-commerce business model. What began as a systematic digital process for receiving orders and handling deliveries must also be enhanced to manage the increased flow of returns.
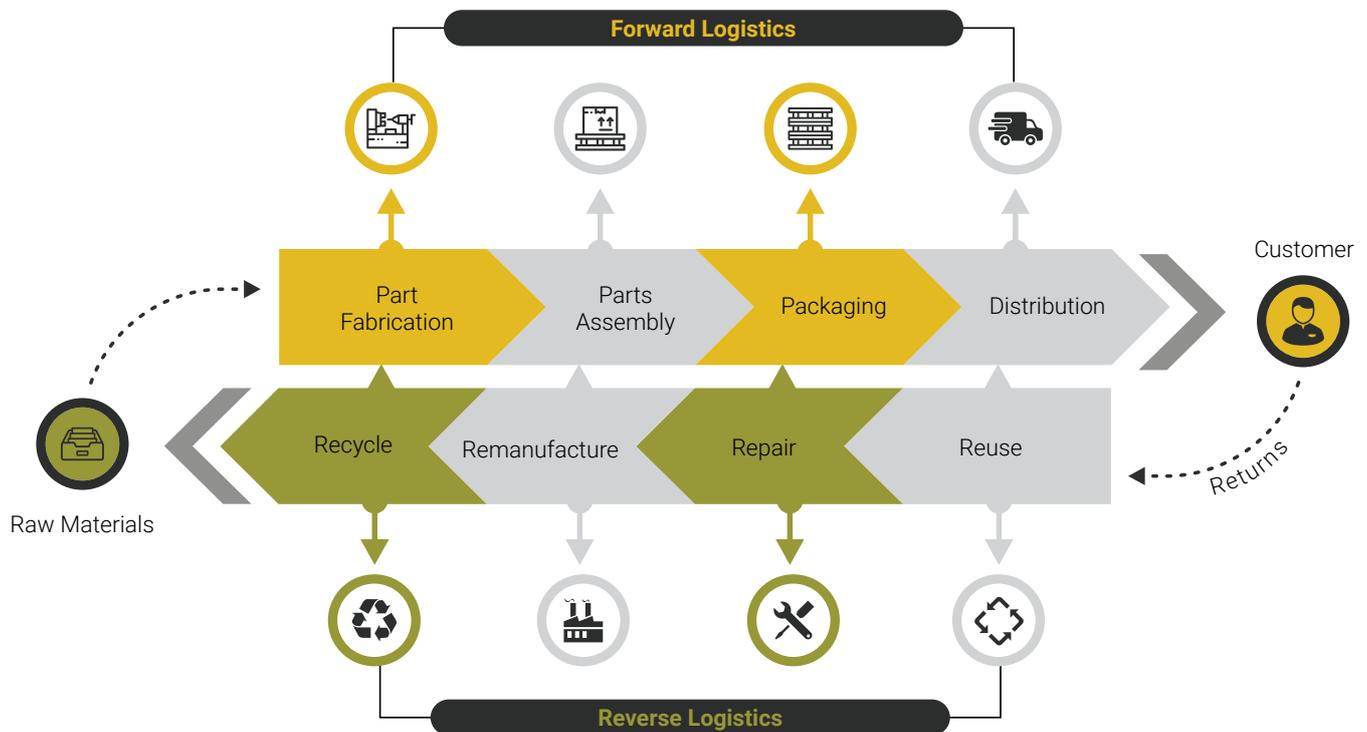
Business Drivers

Having a well-architected reverse logistics strategy is a competitive advantage for businesses in differentiating themselves from competitors.

The key business drivers for an efficient reverse logistics management process include:

1. Cost of Returns and Profitability

The National Retail Federation (NRF) reported that in 2015, Americans returned over $260 (4) billion worth merchandise to retailers. In other words, 8% of all purchases were returned. If "Returns" were classified as a business, it would rank third among the Fortune 500 businesses. An average reverse logistics cost to a retailer is 8.1% of the total sales whereas a manufacturer spends 9%-15% of the total revenue on returns [5]. Improving reverse logistics strategies can help a company increase its revenue up to 5% of its total sales [6]. Delayed returns handling and back and forth freight costs affect sales, inflate operational costs and diminish profitability.

2. Inventory Management

Large inventories increase storage cost while idle inventory lowers profit. Teams that handle Reverse Logistics must be a part of the supply chain planning and execution. The ability to plan, procure, and maintain optimal inventory levels in line with sales helps businesses maximize their savings on operational costs and delivers a direct contribution to their bottom-line. A smarter reverse logistics process with historical data could help in identifying best logistics vendors who deliver value for money.

3. Customer Satisfaction

Considering that e-commerce has a return rate that hovers between 25-30%, recent studies have found that 60% of the online customers review return policies on websites before making purchase decisions. 95% of customers would not buy from a company with whom they had a negative return experience, "while 95% of unhappy customers will return back to the retailer if the issue is resolved quickly and efficiently" reports NARMS [7]. Furthermore, 95% of customers who have had a bad experience will share that information more often than the positive ones they have had [8]. This clearly highlights the importance of establishing easy return procedures in the purchase cycle. Publishing a clear return and refund policy on the websites with details on the process, charges applied, timeline, and 3rd party service provider details (if any), and related information can avoid significant costs, time delays, and customer frustration.

We have repeatedly seen that buyers are willing to pay for a brand that comes with better service experience. With the increasing importance of social media-based ratings and reviews, businesses cannot afford to damage their online reputation with a reverse logistics process related issue.

4. Competitive Advantage

Customers tend to be extra cautious when it comes to online buying for two reasons; 1) they are not able to interact with their purchase in person as they would do in a physical store and 2) they incur additional shipping costs. Hence, a clear and hassle-free returns policy implies that the business is committed to satisfying their online customers with quality products, processes and systems. In cases where customers are not happy with their purchase due to product quality or some other aspects, professionally handling the returns might ensure their continued patronage and brand loyalty.

5. Compliance

Industries have to abide by the quality benchmarks, standards, and regulations as set by institutional bodies for protecting the mutual interest of customers and businesses. Industries like pharma, battery manufacturers/traders, electric appliances, electronic gadget producers have specific compliance policies like RCRA-C compliance, REBAT,

RELECTRA respectively. It is important for businesses to comply with industry standards and regulations to gain customer acceptance and status. Breach of compliance leads to loss of reputation, penal actions and with extreme cases even business discontinuity.

6. Carbon Emissions

Increasing awareness about carbon emissions and its deteriorating effect on our atmosphere has given new mandates for businesses to act with social responsibility. Other aspects of reverse logistics like recovering, recycling, refurbishing and remanufacturing contribute to the environmental health. Inefficient returns handling process would increase carbon emissions due to back and forth transportation of vehicles. When a business explicitly publishes it's carbon emission levels for public, it is a noteworthy differentiator among peers.

7. Technology

Regardless of the volume of business, automation certainly helps the process as manual processes can cause productivity, errors and delays. Automation not only takes care of business workflows but also offers total visibility into the whereabouts of inventory, stockpile, and an average number of returns handled by the company to recover maximum value. Application of data visualization, dash boarding can help reverse logistics team with real-time actionable insights. A business can choose to implement a cloud-based automation system or build it internally if they have the necessary resources and expertise.

Popular E-Commerce platforms that handle Reverse Logistics

There exists a stiff competition among Enterprise level Digital Commerce platforms in the market. The below platforms are rated as Leaders in Gartner's Magic Quadrant 2017 for Digital Commerce products.

Magic Quadrant
Figure1: Magic Quadrant for Digital Commerce
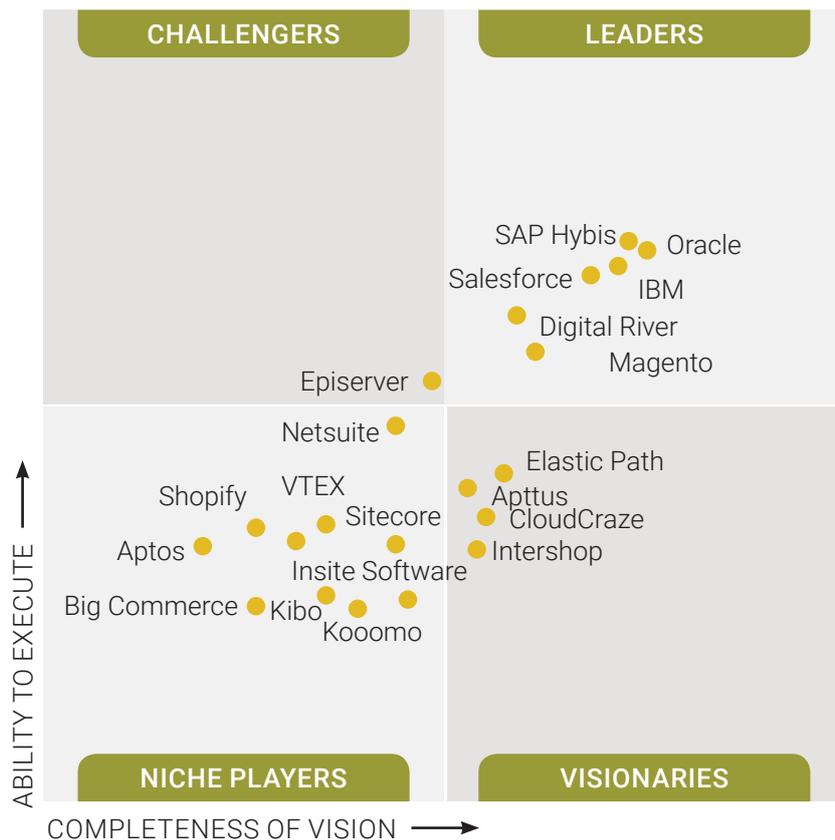
Gartner defines Digital Commerce as "Buying and selling interactions among businesses, people and things for products/services via digitalization technologies. These interactions result in a valued transaction to the customer, based on a combination of factors, including good customer experience, inexpensive price, timeliness, ease of use, clear policies and others."

Gartner's reports that Digital sales revenue, digital channels and customer experience are high on CEO's agenda according to the 2016 Gartner CEO Survey. Expectations are also running high, with three specific demands for digital commerce applications:

1. To develop superior customer engagement and generate more revenue value.
2. To do more business and create more business through digital channels.
3. To generate a greater proportion of business through digital channels

This very well resonates the reliance on Digitalization to deliver superior customer engagement across the buyer journey. Let us quickly go through brief overviews of these digital commerce platforms.

SAP Hybris

SAP Hybris is the world's leading Omni-Channel customer engagement and commerce solution. SAP Hybris has been ranked as a "Leader" for the year 2016 in the "Magic Quadrant for Digital Commerce" report released by Gartner. More than 2500 international customers are using Hybris platform for automating their Omni-Channel commerce business models.

Hybris is an enterprise level e-commerce platform that readily offers B2B and B2C storefront, merchandising, master data management, order management, and web content management functionality. The platform is mobile friendly and responsive to Android and iOS devices.

Hybris is developed using the Service Oriented Architecture (SOA) that offers necessary infrastructure, flexibility, versatility to build custom components that fulfill unique business requirements.

SAP Hybris Order Management System

The SAP Hybris Order Management System has automated the entire order execution cycle. Hybris accepts receipt of orders, automates fulfillment process and logistics administration, and as well as returns-management. Customers from the storefront can collect their products from pick up locations or initiate returns and drop the products in collection centers. Businesses can check their stock availability across different channels and manage optimal inventory levels at different warehouses. Advanced reporting enables Line of Business (LOB) stakeholders to handle their respective functions achieving targeted Key Result Areas.

Oracle Commerce

The Oracle Commerce is a cloud-based e-commerce platform that delivers best-in-class commerce applications focused on personalized user experiences, business user enablement, and scalability to meet the evolving demands of commerce. Retailers are facing technology limitations to cobble siloed tools and systems together to manage consumer-driven, cross-channel experiences while meeting the goals of their business. Their customers now expect relevant, personalized, and consistent experiences across multiple touchpoints they engage with to make purchase decisions.

Oracle Commerce Solution is an open, extensible platform that can integrate with any stack. It has the unique strength to automate processing of large volumes of diverse data to deliver more engaging experiences at a lower cost to the business.

IBM Commerce

IBM Web Sphere Commerce or IBM Commerce is an Omni-channel e-Commerce solution that offers ability to do business with B2B, B2C, or merchandisers. IBM Commerce helps retailers to provide their customers and partners with a personalized, seamless shopping experience through all possible touch points including web, mobile devices, social media, call centers or in-store. WebSphere Commerce is a customizable, scalable and high availability solution primarily based on Java and uses open standards

Demandware

Demandware Commerce is a cloud-based technology for retailers, allowing them to develop and manage custom digital commerce and mobile commerce sites. The technology includes a cloud-based platform with applications for e-commerce merchants, developers, and administrators. The platform enables worldwide consumer engagement across devices, including laptop, desktop, tablet and mobile computers. Demandware's order management system enables retailers to ship online orders from stores, or to allow shoppers to pick up their web purchases in their local stores.

Challenges in Automating Reverse Logistics

1. Industry specific SCM Expertise

We have repeatedly discussed that each industry and individual businesses underneath are unique in their operational model. Though SaaS based e-Commerce platforms handle reverse logistics to some extent, they don't accommodate industry specific niche areas. Modern supply chain management is characterized by 360-degree visibility of a product throughout the inventory life-cycle, real-time product tracking using mobile devices, automated alerts, and status updates on reaching shipment/dispatch/ delivery milestones and advanced KPI tracking. So, when a business decides between implementing an Off-the-Shelf reverse logistics solution or custom-build an in-house system, it requires deep-industry and supply chain management expertise to achieve desired goals.

2. Sophisticated Technology Expertise

The reverse logistics management process has been characterized by an omni-channel environment with infusion of Cloud, mobility, 24/7 high-speed internet connectivity, Secure QR Code scanning devices, digital delivery devices, and GPS-enabled transportation vehicles. To tackle this complexity, a business needs to evaluate many factors before making a decision on whether to build an internal automation system or swiftly adopt a leading SaaS-based reverse logistics platform. The cost of external or in-house experienced resources who consult, implement, enable teams in using the reverse logistics system needs to be factored in as well.

3. Time and Investment

With continuous increase in productivity, product life cycles are shortened and consumer demands are becoming diverse, making the enterprise face ever-changing competitive environment. Hence, implementing a highly agile reverse logistics system is necessary to reduce costs and meet consumer demands. Businesses should not only be able to automate their current reverse logistics processes but also have the ability to accommodate emerging business needs. This requires investing time and on the resources with needed capabilities across industry domains, technology capabilities on par with the Industry's best. Any minor time delays or miscalculated investments will take a huge toll in lost business conversions.

4. Internal Readiness

Reverse logistics calls for strategic involvement and inputs of LOB executives starting from planning to everyday

execution as it liaises with manufacturers, dealers, distributors, suppliers, and customers. The decision to dedicate budgets, human resources and whether to either build, implement or outsource reverse logistics management to a 3rd party will not succeed if internal business processes are not ready. Continued improvements in planning and execution along with a tight feedback loop from all internal, external stakeholders and customers will ensure maximum readiness for effectively implementing an automated reverse logistics management process.

5. Outsourcing

Upon critical evaluation, businesses could consider offloading reverse logistics partially or fully to 3rd party service providers. The Reverse Logistics Association reports that up to "20% of the companies in high-tech sector outsource reverse logistics to third-party service providers(ref)." Some businesses also feel that the idea of fulfillment, handling returns and reverse logistics is not their core business and would rather focus on expanding their mainstream business than spending their time and efforts in order fulfillment process.

Case Study

The Client

Purchasing Power is the leading specialty e-retailer offering consumer products, vacations, and online education services through stress-free, hassle-free payment plans. Headquartered in Atlanta, Purchasing Power is available to six million people through large companies – including Fortune 500s – and government agencies. Purchasing Power has been honored with the "World Class Service" award by the Smart Business Administration and was recognized as "Atlanta's Best and Brightest Companies to Work For" earlier this year. Purchasing Power is 'Powering People to a Better Life™' through its employee purchase programs, financial literacy efforts, and charitable contributions. Purchasing Power is a Rockbridge Growth Equity, LLC Company.

The Problem Statement

Purchasing Power recently switched from their in-house legacy application to SAP Hybris as their Omni-Channel e-commerce platform. Handling a huge volume of online sales, the client was receiving their share of returns.

Prior to implementing SAP Hybris, Purchasing Power was handling returns manually using their customer contact center. Purchasing Power's return-related business rules are unique to themselves. Returns are not allowed for certain product categories and products that are delivered by Freight. When a customer initiates a return request on their portal, Return Merchandise Authorization (RMA) labels were created by the customer service team manually to permit the return of the product instead of generating automated ones. The customer service team informed customers about the mail-order return through an email.

The Customer service team was under constant pressure as the return requests were queued. To avoid processing delays and customer frustration, Purchasing Power decided to fully-automate a self-service reverse logistics solution that integrates SAP Hybris and the Cloud Blue as their server providers for reverse logistics. As returns are costly for the retailer and inconvenient for the customers, they needed a unique reverse logistics workflow.

The Solution

Softcrylic worked with Purchasing Power to understand their business process flow, control check points,

integration and detailed reporting requirements. Purchasing Power needed a solution that integrates Cloud-Blue and SAP Hybris to handle returns management.

A custom code-based reverse logistics workflow was put together to integrate with Cloud Blue using web service to generate RMA and labels for shipping items and only RMA for freight items. The integration securely connected both the portals allowing customers to initiate return requests in a self-service manner that triggers the Cloud Blue portal to create a Return Merchandise Authorization (RMA) label. The RMA label gets displayed in the customers' order management section in Storefront. All back and forth transactions are logged in the CS Cockpit (see the Refund/Replacement figure).

Softcrylic's custom coded solution proves to be a time-saving solution minimizing work-load of the Purchasing Power teams and improving their productivity. The solution provided a gateway for the return requests information from the Cloud Blue portal to reach the SAP Hybris platform. The solution brought down the heavy-lifting involved in returns management process and improved the efficiency of the customer service team.
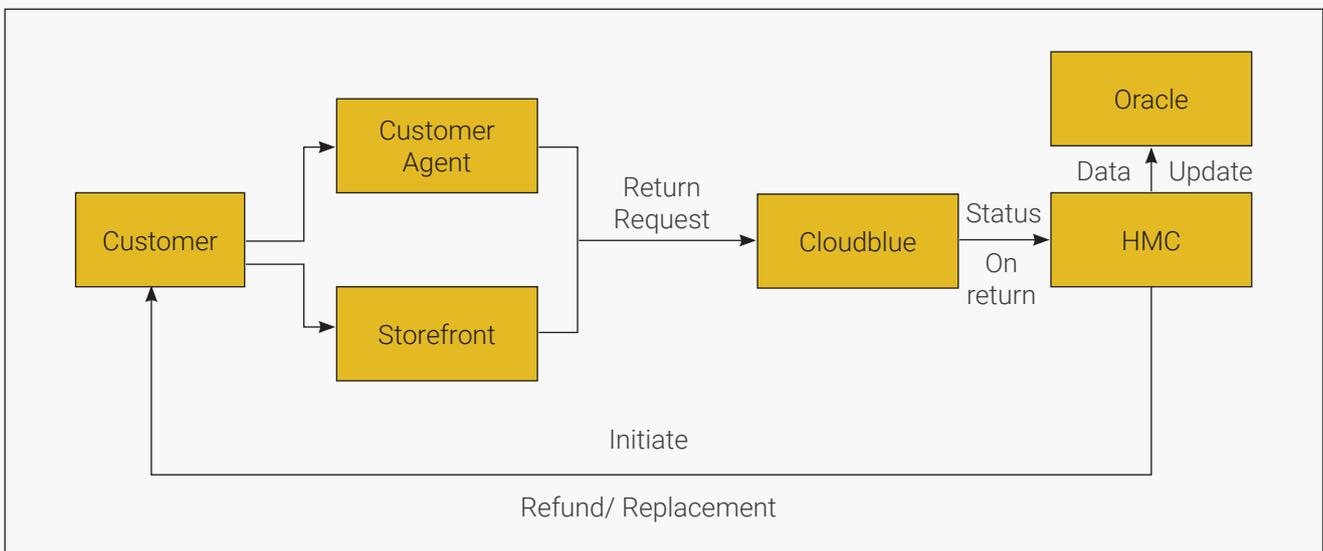
Client Benefits

1. Heading into holiday shopping season, the implementation of this integrated reverse logistics system proved to be a boon for satisfying customers on-time and prepping customer service teams to efficiently handle inbound returns volume.

2. Achieving same-day turnaround in responding to or resolving customer returns

3. The faster handling of returns helped Purchasing Power classify Return-to-Vendor (RTV) and Non-RTV assets and recover value by reconditioning, refurbishing or liquidating.

4. Timely disposing of outdated appliances and devices helped the client stay compliant with environmental rules and regulations.

5. Increased productivity in generating tickets, receiving returns and processing them with logistics teams

6. Self-service return initiation boosted the brand image and trust among customers

7. The management had achieved greater visibility of their order management, consignment planning, returns handling, value realization processes.

Conclusion

The reverse logistics function has serious cost, trust, profitability, and waste implications to the business and overall environment. It needs to be handled with utmost care. Information technology aids the reverse logistics function and offers solutions to manufacturers and retailers who can turn potential losses into savings.

While market leading automation solutions like SAP Hybris or Oracle Commerce are available to systematically handle reverse logistics, each business is unique in terms of handling returns. Today many manufacturers and retailers use third-party fulfillment providers and intermediaries to focus on expanding and improving their core business more efficiently. This calls for integrating their e-commerce platforms with web, mobile applications of 3rd party service providers. Custom application development integrates enterprise e-Commerce systems with 3rd party logistics providers' apps.

Reverse Logistics is bound to get further complicated with infusion of machine learning, Internet of Things, wearable devices, and strict regulatory compliances. Automation is the way forward to provide superior user experience to customers that include reverse logistics as a major part in it. Businesses need to capitalize on the advancement in technology and availability of technical expertise that is abundantly available.

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About Softcrylic

Softcrylic is an IT Solutions and Services company dedicated to delivering effective solutions to clients since 2000. Softcrylic provides a full range of solutions and services in a variety of technical disciplines including Software Development, Test Engineering and Digital Analytics. For more information, go to http://www.softcrylic.com to learn more.

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