REVERSE LOGISTICS

Point-of-View: Customer Returns - A post-pandemic business opportunity?

Reverse logistics and returns management pose incredible challenges and opportunities for businesses across the world. The simple fact is that the art and science of supply chain management and execution has traditionally focused on forward fulfillment. Managing customer returns is a chance to increase customer satisfaction (and thus boost loyalty); improve service delivery to end users, vendors, or channel partners; and a means to significantly reduce costs, especially when it comes to global supply-chains.

DRIVING EFFICENCIES FROM REVERSE LOGISTICS
How SAP Logistics Solutions can be leveraged to manage customer returns

In recent decades, global value chains have become a structuring feature of the world economy. Today, products are no longer manufactured in one country only to be exported to another country. Within the framework of global value chains, production processes are divided across national borders and offer companies the opportunity to make their production and supply chain processes more cost-effective and time-efficient, thus increasing their competitiveness. However, the more branched and international the supply chains, the riskier.

Since Corona, the business community has been aware of the enormous costs of a break-down and globalization is not any-more considered an irreversibly progressive process.

Many companies are currently struggling with the acute problems of the pandemic: Loss of sales, liquidity problems, short-time work or even insolvency are confronting the economy with previously unknown problems. Interrupted international supply chains, failures and bottlenecks - With breathtaking speed, the Corona crisis has highlighted the inadequacies and fragility of global supply chains.

The pre-pandemic macroeconomic environment of globalization and outsourcing has already resulted in the commoditization of products and erosion of margins. This has put pressure on manufacturers and retailers to not only drive efficiencies from their supply chain through outsourcing of non-core competencies, but to distinguish their products and trading goods through superior levels of customer service, omni-channel experience and customer intimacy.

The processes associated with handling the return of orders and packaging from customers, better known as "reverse logistics", is in many ways the neglected child in the extended family of the supply chain. For many companies, the priority is to make sure that the goods get to the outside world, not to manage their returns efficiently.

However, there are still companies that do not properly understand the value of returns for their revenue or reputation. Most are distracted by the fact that returns can be expensive and difficult to manage. As a result, returns have traditionally been treated as exceptions within the normal operation of core supply chain processes and IT systems.

With the increasing desire to improve customer service, returns logistics has become more and more important.

Thus, the pandemic-crisis has not only accelerated the creeping trend towards deglobalization, revealed weaknesses in the current system, but also provides retailers and manufacturing companies with both opportunities for future improvements, as well as challenges when it comes to implement or rethink their reverse logistics processes and operations.

In this document we would not only like to share our own observations and conclusions, our point-of-view how the current crisis may impact retailers and manufacturers, but also how SAP logistics solutions can be leveraged to manage the overall reverse logistics process in general, and customer returns in particular.

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RETAILER & WHOLESALER
Observations & Lessons Learned

Margin pressure, rising customer expectations, increasing complexity of supply chains against the background of short reaction- and lead-times, high and deep product- and assortment-ranges, stock levels and turnover – The retail industry, under great competitive pressure, has used return policies as a competitive weapon – the greater the pressure, the more innovative the solutions. Within the retail industry, it appears that necessity, indeed, is the mother of invention. The current economic situation its accelerator.

Consolidation & Pressure

Over the last several years, retailers have consolidated. Now more than ever, large retail chains are the rule. These large retailers have more power in the supply chain than retailers did a few years ago. In general, the large retailers are much more powerful than the manufacturers. At the same time Returns reduce the profitability of retailers marginally more than manufacturers. As a result, retailers should be prioritizing reverse logistics in order to optimize the process, and with the proper strategies and software in place, reverse logistics should be part of the larger product and customer lifecycle strategies and can serve as a foundation for establishing customer loyalties and increasing market share, especially after the pandemic.

Increasing Online Sales

Not surprisingly, e-commerce spiked during the lockdown with physical stores closed and consumers with time on their hands to surf the internet. This dramatic change in consumer shopping habits emphasizes the importance of omnichannel strategies and a resilient supply chain. With the significant growth in ecommerce purchases, there will be an inevitable increase in returned products. In addition, consumers are expected to continue purchasing more online goods even after the pandemic ends.

Rising Consumer Expectations

Many consumers and business customers now receive "quibble free" guarantees for the free return of goods, extended warranties or "money-back" promises. This is especially true and expected for online purchases. The possibility to return online purchases illustrates the growing recognition that flexible return procedures can be an effective sales incentive for customers. It gives confidence to make a purchase in the knowledge that they can send back any items that fall short of their expectations. In addition, what used to be a service innovation in the past, turned into an expected commodity and de-facto standard for the entire industry.

High Return Volumes

In fact, even before the pandemic, customers and consumers buying online are already returning a high proportion of their purchases back to the vendor. This is especially true for fashion and non-food consumer-products, finally leading to growing volumes of returns eating into revenues.

In addition, there are many other factors like regulatory requirements acting as a catalyst for the introduction of reverse logistics initiatives, business process reengineering and increased investment in new software solutions.

Regulatory Requirements

In many countries, home-shoppers are legally entitled to return the ordered merchandize. In Europe, e.g. the "European Commission Distance Selling Directive" stipulates, that anyone buying online, or by telephone, fax or mail order, should be able to change their minds about their purchase up to seven working days after goods are received. No explanation for the rejection of the goods will be required. This is likely to enshrine in law a general market trend conferring greater flexibility to return items bought online compared to bricks-and-mortar purchases.

Aftermarket Revenue Streams

Apart from that, Europe is increasingly focused on sustainability and encourages the greater re-use of packaging materials and recycling of used products, especially when it comes to consumer-electronics and household appliances. Aside from these legislative requirements, many companies are stepping up their packaging reclamation and reuse for economic reasons, recognizing the cost benefits associated with limiting their expenditure on new packaging materials, or recycling old and used products. In this context, return-items and replacement products, as well as associated services, can also have an economic value and generate new aftermarket revenue streams.

"Reverse logistics is a process that is simple in theory, but difficult to manage in practice"

REVERSE LOGISTICS
Definitions and Interpretations

The Council of Logistics Management (CLM) published the first known definition of Reverse Logistics stressing the recovery aspects of reverse logistics (Stock, 1992): "...the term often used to refer to the role of logistics in recycling, waste disposal, and management of hazardous materials; a broader perspective includes all relating to logistics activities carried out in source reduction, recycling, substitution, reuse of materials and disposal." The European Working Group on Reverse Logistics, puts forward the following definition (Dekker et al., 2003): "The process of planning, implementing and controlling flows of raw materials, in process inventory, and finished goods, from a manufacturing, distribution or use point, to a point of recovery or point of proper disposal". In summary, the definition of Reverse Logistics has changed over time, starting with a sense of reverse direction, going through an overemphasis on environmental aspects, coming back to the original pillars of the concept, and finally widening its scope.

MANUFACTURER
Observations & Lessons Learned

Today's macroeconomic environment, global supply-chains, outsourcing and consumer market visibility has resulted in the commoditization of products and erosion of margins. Manufacturers are not only facing additional pressure to drive efficiencies from their production operations, but to distinguish their products through superior levels of customer service. After-market service and reverse logistics has not only proven to be a critical component of customer satisfaction but can be a key component of top line revenue and profit.

Differentiation through Service

The challenge of maintaining a seamless supply chain in the manufacturing industry that preserves customer satisfaction where product quickly falls into obsolescence is critical to maintaining a company's reputation and brand loyalty. It is certainly wrong to believe that outbound operations can also handle returns by running everything in reverse. However, reverse operations must manage several unique functions that are not included in outbound operations, e.g., collection of outdated, unwanted or damaged products as well as repair operations, replacements, spare parts and all related financial transactions.

Regulatory Requirements

The ever-increasing volume of global legislation on hazardous materials, such as the European Union's "Waste Electrical and Electronic Equipment" and "Restriction of Hazardous Substances" only to mention two examples, forces manufacturers to not only look at reverse logistics for repairable products, but for a much wider range of low cost parts previously treated as consumables. All this occurs against a backdrop of system pricing pressure and the need for the service organization to minimize its warranty costs, whilst striving to improve the quality of its service delivery through better fill.

Inventory & Asset Recovery

"The best comes for last!". This certainly applies to many situations, including developing effective systems to manage logistics throughout the product lifecycle. However, selling a product to a customer is not the end of the product life cycle. Its end point extends far beyond that. There are many challenges for manufacturers. Lack of visibility into inventory levels and demand, resulting in stock-outs, excess inventory, and poor response time to customers have proven to be critical pain points. Existing systems and planning software, geared towards production runs, are sometimes ineffective in managing their service parts programs.

Asset Recovery

Unfortunately, many organizations today have yet to implement programs to maximize value from assets in the latter stages of the lifecycle. This oversight leads to lower value recovery and excessive administrative costs In contrast, many companies have a laser focus on the order, yet few companies manage returns well. This is significant considering that the cost of a return is three times the cost of an order. By redefining the return supply chain, manufacturers can create significant opportunities to improve value and strengthen brand presence.

Outsourced Manufacturing

Production is increasingly being outsourced to Original Design Manufacturers (ODMs), with the brand-owning "manufacturer" remaining on the product either as an assembler or, in extreme cases, as a mere brand logo. This changes the dynamics of reverse logistics as the size of the repair vendor base decreases and the links between manufacturing and service become weaker. Often, the increasing outsourcing of manufacturing drives up the size and cost of repairable parts, which, if left uncontrolled, has a negative impact on inventory levels and obsolescence.

Outsourcing of Reverse Logistics

Outsourcing of reverse logistics and repair operations to logistic service providers and external partners, are a valid strategy for OEM's to improve their overall levels of service productivity and efficiency. The market for deport repair, spare parts and logistics outsourcing of physical distribution and extended warranty services is already large and still growing. In addition, beyond classical operations like ware-housing and distribution, there are several additional services that larger logistics and repair providers have expanded to, only to mention contract manufacturing, express and parcel shipments as well as inventory management and planning.

REVERSE LOGISTICS
The dirty end of logistics in manufacturing?

There is no doubt, for manufacturing companies reverse logistics – primarily focusing repairables - is traditionally been considered the "dirty end of logistics", while return operations are targeted on minimizing repair cost. Today, reverse logistics is not just about returns and repairables but involves – in addition to the main question "does it make sense to repair it" the following considerations:

- How can we track and finally improve product quality during the manufacturing process?
- How can we reduce defects from externally procured parts and components?
- What needs to be done with the disposal of returned products to meet environmental legislation?
- Is there a warranty on the product that can be reclaimed, exchange parts to be distributed or refunds to be paid?
- Can we generate revenues from recycling, refurbishment or additional service offerings?
- How can we accurately plan and predict repair and maintenance operations, or mean time between failures?

Manufacturing Returns

Quality Checks & Samples
Raw Material & By-Products

B2B Commercial Returns

Vendor Returns
Over-Delivery & Rejections
Product Recalls
Stock Adjustments
Internal Replenishment

B2C Customer Returns

Warranty & Reimbursement
Planned or unplanned returns
Collection & Pick-Up
Goods-Receipt & Quality Inspection

Customer Service

Service Desk
Customer Self-Service
Return at Sales Counter
Planned Return with Advanced Notice
Unplanned Return with Direct Shipping

Logistical Follow-Up

Scrapping
Forward to Other Location or Distribution Center
Cross-Company-Code Store Return
Forward to Vendor (via Distribution Center)
Back to Customer
In-House / External Repair / Refurbish
Exchange product to Customer

Material Inspection

Inspection at Receiving Sales Location
Inspection at Distribution Center
Inspection at Supplier
Inspection at Customer Site

Customer Refund

Immediately
After Inspection
After Compensation by Supplier
At any Point in Time in the Process
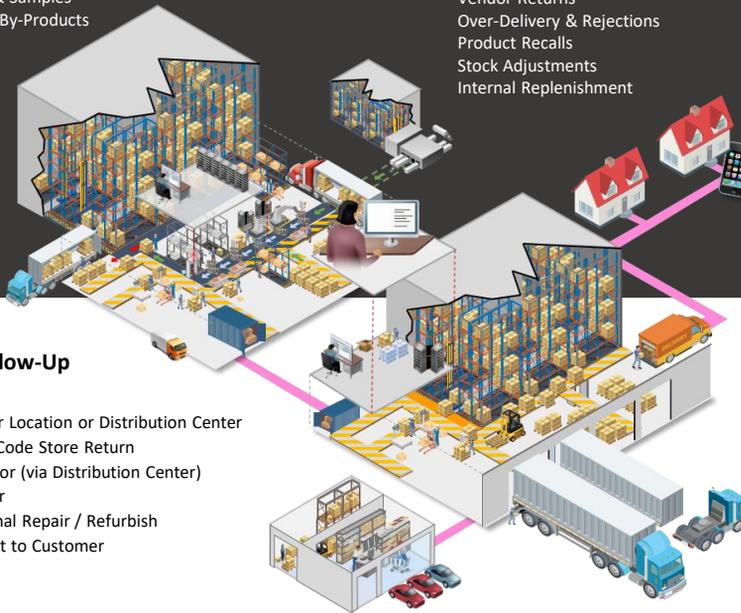
CUSTOMER-, COMMERCIAL-, MANUFACTURING- & DISTRIBUTION RETURNS
Definitions and Interpretations

Roughly speaking, products are returned or discarded because either they do not function properly or because their function, or availability is no longer needed. These return reasons can be categorized according to the usual supply chain phases: starting with manufacturing, going to distribution until the products reach the final customer or consumer. In order to distinguish Customer Returns from other reverse logistics operations we briefly summarize their main characteristics.

Manufacturing Returns

Manufacturing returns are typically defined as all those returns for which the need for recovery of components or products is identified during the production process:

Raw materials may be left over, inter- mediate or finished products fail pre- or post-production quality checks, need to be reworked, re-used as by-products or scrapped. These leftovers from production represent 'not-needed products', while quality-control returns typically fit in the 'do- not-function' category.

Distribution Returns

Distribution- or supply returns refer to all returns that are initiated during, or after the distribution phase. Main reasons are product recalls, commercial returns, stock adjustments or functional returns.

In this context, recalls are product returns initiated by the manufacturer or supplier typically because of safety or health problems. These product recalls fall in 'distribution returns' as they are – different from the next mentioned 'commercial returns' - usually initiated during the distribution phase.

Commercial Returns & Transfers

B2B commercial returns – also called vendor returns - are all those returns for which a buyer has a contractual option to return products to the seller. This typically refers to wrong – or damaged deliveries, to unsold products or over-deliveries that retailers or distributors return to, e.g. the wholesaler or manufacturer. The latter also include outdated products, i.e. those products for which the shelf life is too short and may no longer be sold.

Stock transfers or adjustments are typically internal returns or replenishment when an actor in the internal supply-chain re- distributes or transfers stocks. Thus, stock adjustments occur within a company while commercial returns involve more than one company alone. Typical scenarios include stock adjustments between warehouses or shops for instance in the case of seasonal products, local stock-outs or changing demand patterns.

Customer Returns

The fourth group consists of customer returns, e.g. those returns initiated once the product has reached the final customer or consumer. Typically these B2C commercial returns - e.g. reimbursement guarantees - give customers the opportunity to change their minds about purchasing when their needs or expectations are not met, usually shortly after having purchased or received or the product. In addition, as previously mentioned. This return policy might also be a legal obligation of the supplier or vendor.

BUSINESS IMPERATIVES
Functional Building Blocks and typical IT-requirements

Given the frequency, number, and character of items returned differs drastically from company to company, it is no surprise, that there is no single reverse logistics strategy that is ideally suited and fits all industries.

E.g. online fashion retailers delivering garment in different sizes to a very large customer base will be markedly different from those of a manufacturer delivering heavy industrial components to a small number of regional suppliers. In addition, products and articles can be routed for repair, refurbish, repackaging, remanufacture, reclamation of parts, upgrading, or recycling. Therefore, the balance of disposition options can also vary significantly for each industry, regional expectations, legislation, item types and competitive differentiation – finally posing specific requirements to the underlying IT-infrastructure and applications, combining customer service, returns management and logistic operations in an end-to-end process.
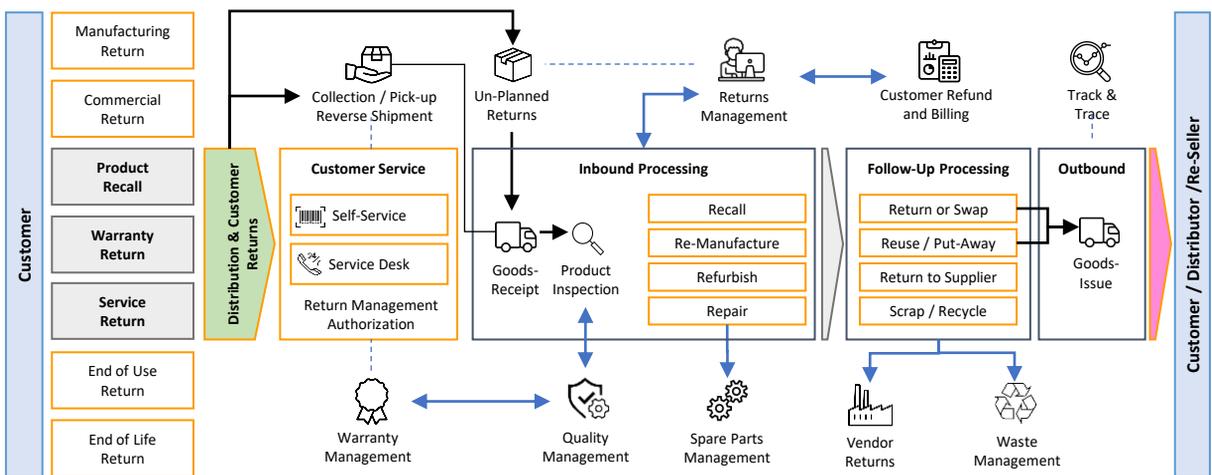
Customer Service

Customers like to buy from companies that have a higher customer satisfaction level. Excellent customer service is essential for the growth and development of a company in any vertical or commercial industry. Modern solutions for customer service not only offer functionality to quickly solve problems and provide highly personalized customer service, but also to process warranties, integrate with Returns Management and Logistic Operations, and thus maintain customer loyalty.

Returns Management

Traditionally, ERP systems have always provided a strong transactional backbone to enable better customer service and manage return processes but getting the most value requires a system designed specifically to manage the challenges of the customer service supply chain including reverse logistics warehouse operations, quality management and flexible process modelling options to meet todays and future requirements for an advanced returns management.

Inbound & Outbound Logistics

The bulk of responsibility for tracking and managing returns normally falls upon the warehouse management system. It can be considered as the "Line of Defense" of the reverse logistics process, breaking the confused waves of customer returns down into follow-up activities to sort, inspect, approve, categorize and route for disposition. In addition it keeps the process in control, allocates inventories and offers routines and integration for storing, distributing and accounting of the goods.

IT REQUIREMENTS
Flexibility, scalability and seamless integration

Customers are expecting hassle-free returns and notifications every time their return is further processed. In addition, "omni-channel"-returns, regardless whether products have been purchased online or "brick-and-mortar" are becoming a de facto industry standard. Vendors that have an easy and flexible returns process, can not only meet customer expectations, but also boost their sales lowering barriers for their customers to place their orders. However, this need for flexible and diverse reverse logistics processes state many IT-challenges especially when it comes to flexibility, visibility and integration.

- Flexible ways of return initiation
- Continuous visibility and updates
- Quick assessment of returns
- Automatic follow-up activities
- Fast compensation of customer
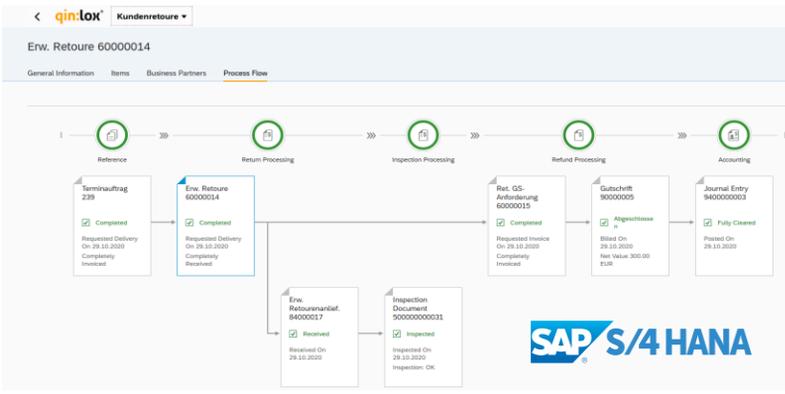- Integration to logistics

How can SAP help to drive innovation …?

CUSTOMER RETURNS WITH SAP

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From an IT-perspective, it is indispensable to have a customer returns solution that is flexible enough to support different return scenarios while being easy to use and providing end-to-end visibility to every stakeholder. SAP, complementing their customer centric solutions for customer service, provides a solid and flexible foundation for customer returns and reverse logistics operations and – especially in the context of the new SAP S/4HANA foundation – heavily invested in new functionality, end-to-end integration and an increased user experience leveraging latest FIORI-Technology.

SAP Advanced Returns Management (ARM)

SAP ARM supports the whole returns process in a flexible way: Supporting both; planned as well as unplanned returns, together with onsite services, customers can return their products while ARM provides full transparency in reverse logistic operations and follow-up activities. Typically this process starts with a return order referenced to the original sales order, followed by a return delivery, the physical goods-receipt in the warehouse and the inspection of the returned products.

The inspection determines the further path of the product and can automatically trigger logistic follow-up activities. Based on the inspection result, it can be stored, scrapped, returned to the vendor, valuated as used, or sold to a re-seller. Alternatively, the product can be repaired – inhouse or at customer-site or the customer can receive a replacement material instead. It is also possible to reject the return and sent it back to the customer. For valid claims and returns, the customer will be refunded.

SAP E-Commerce Returns

SAP offers a FIORI app that is ideally suited to process E-Commerce returns. The app provides an easy-to-use and appealing user-interface to cover the whole receipt process of planned and un-planned returns – all the way from scanning a reference to identify and verify the returned product, over entering inspection results to finally sort the products according to its product condition and automatically trigger follow-up activities and internal routing in SAP EWM.

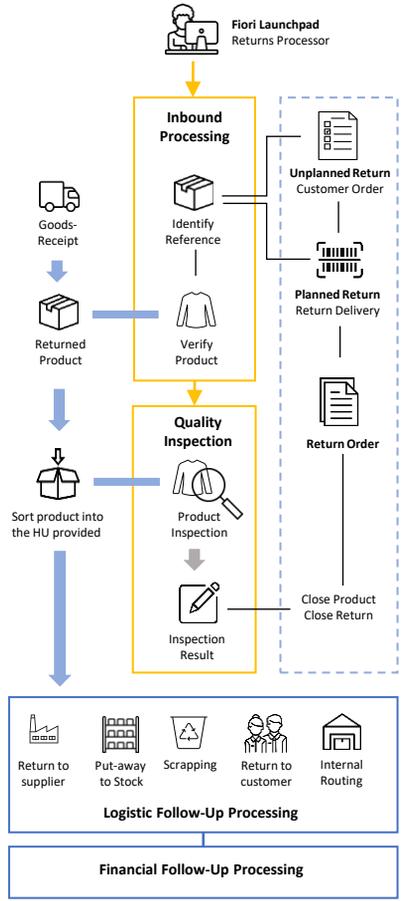
SAP EWM AND SAP S/4HANA
A solid platform to manage returns and reverse logistics

SAP Extended Warehouse Management (EWM) is SAP´s current flagship product for warehouse logistics and is a backbone for reverse logistics operations. Together with SAP ARM and SAP S/4HANA - SAP EWM already provides a solid functional platform and flexible foundation for current and future requirements to manage different return scenarios and seamlessly integrate and automatically trigger follow-up activities and intra-logistics operations for valuated as as well non-valuated stock. Managing Customer-Returns today means, that vendors have to take faster decisions, react more flexible and meet customer expectations while efficiency and transparency of customer return handling

can significantly boost customer loyalty. In combination with SAP S/4HANA and SAP's latest UI-Technology the whole process is more transparent and provides a great user experience. Analyses based on real-time data and their visualization have become indispensable – with SAP S/4HANA business users can find relevant reports and dashboards next to their operational tasks without changing the system. In parallel SAP heavily invested in its Analytics Cloud. Today, SAP S/4HANA on premise integrates SAP Analytics Cloud for an embedded experience with live-data-connections for business users involved in customer return operations.

"Spanning the full-range from logistic execution to financial operations - with Advanced Returns Management integrated in S/4HANA and SAP EWM, SAP offers powerful solutions to manage both, customer- as well as vendor returns. In addition, leveraging latest FIORI technology, the 'Process e-Commerce Returns' app combines the whole returns receipt process with an excellent user experience."

Patrick Windzio
SAP EWM Consultant

Digitization of the supply chain, technical innovations, optimization of delivery dates, stocks, capacities and lead times, increasingly complex logistics against the background of industry and subspecific processes and the challenges of seamless integration into existing or new systems?

DIGITAL SUPPLY CHAIN WITH SAP S/4HANA
From roadmap to transformation, from architecture, deployment and migration. We help our customers to leverage the full potential of the Digital-Supply-Chain and get the most out of their SAP investment in SAP S/4HANA. As supply chain experts we primarily focus on what we do best: The implementation, integration and optimization of Procurement, Distribution, Warehouse-Management, Production-Systems and Transportation.

WAREHOUSE MANAGEMENT
From small sites to large logistics centers, manual or highly automated, from simple to complex. Qinlox implements warehouse management based on SAP - locally, regionally and internationally. We are experts from the very beginning when it comes to implement SAP warehouse management solutions, leveraging the full potential of SAP EWM - de-central, as well as embedded into SAP S/4HANA.

TRANSPORTATIONN MANAGEMENT
Carrier collaboration, freight planning, simple and complex freight-agreements, tendering and precise freight cost calculation? The optimization and consolidation of freight plans for domestic, international, single, or multi-modal transportation, mixed pallet building, Addon-Developments, BOPF and system integration? We look forward to realize your SAP transportation requirements.

PRODUCTION SYSTEMS
Discrete-, Repetitive- or Process-Manufacturing? Enhanced and sophisticated internal supply chain strategies and Digital-Transformation? We are experts for production-systems based on SAP and offer a comprehensive service portfolio from strategic advice and evaluation to optimization, implementation and integration supporting our customers on their path to the digital transformation.

Qinlox was founded in 2017 by former employees of SAP SE and, as a young company, combines the many years of knowhow, industry expertise and excellence of proven SAP logistics experts, former SAP standard developers and SAP architects with many years of experience in the implementation and integration of logistics solutions based on SAP technology.

Warehouse logistics, transportation management, production-systems, material flow control, process- and system integration based on SAP. Industry specific processes, functions and system integration? Our expertise is based on the realization of logistics projects in different industries. With our comprehensive service portfolio, we help our customers to leverage the full potential of their SAP solution:

- Consulting & Implementation
- Warehouse Automation
- Technology & Development
- Training & Enablement
- Service & Support

"As SAP Silver Partner and the spatial and personal proximity to Walldorf, we work closely and intensively with SAP, create added value for our customers and deliver high-quality logistics consulting".

Jens Kappauf
Managing Partner | Supply Chain Management

Qinlox Consulting GmbH
Augustaanlage 37
68165 Mannheim | Germany

Mobile: +49 175 5994366
E-Mail: Jens.Kappauf@qinlox.com