



Learning Block 4: Returns and Reverse Logistics

Learning Block 4 Description

This learning block provides an overview of processes, procedures, and steps involved in managing customer returns. It also includes examples of employee responsibilities at different points in the **customer return process** and provides examples of metrics used in customer returns and reverse logistics.

Learning Block 4 Learning Objectives

Upon completing this learning block, the learner will be able to:

- Understand the key aspects of and employee responsibilities in the customer returns process
- Recognize what encompasses reverse logistics, why reverse logistics are important, why reverse logistics are needed, and which key metrics are used in customer returns
- Apply the key metrics used in customer returns functions
- Create good key practices for the customer returns process

Unit 1: Understanding Reverse Flows in the Supply Chain

Reverse logistics is the return of products by customers back through the supply chain. If products are not required by customers who received them or if products are defective, customers may return them in a reverse logistics flow. **Reverse flows** and customer returns have been included in logistics and supply chains for many years. Today, most companies employ a policy of allowing returns if customers are dissatisfied with their purchases and would like to receive a credit or exchange them for different items.

Forward Flow versus Reverse Flow

Historically, the forward flow of goods in the supply chain is more familiar because it is important in terms of filling customer orders and generating revenues. The reverse flow, or product return process, is viewed less favorably because it can result in negative cash flow and inventory restocking. However, most firms view reverse flows of goods as a potential area to display good customer service and ensure customer retention.



Returns management, or reverse logistics, is a trend that is becoming a critical area on which companies are focused to reduce costs by making the process of returns management more efficient and effective. Returns reduce net revenues and increase inventory costs, packaging costs, customer service costs, and processing costs. Defective products delivered to customers may negatively impact retailers' reputations, which could cause a decline in future sales. When sourcing globally, reverse logistics takes on an even more significant role in the economics of the supply chain because of increased distance, time, and transportation cost.



Figure 23. Return to sender. Developed by LINCS in Supply Chain Management Consortium.

Contributing Factor

One of the contributing factors for the focus on reverse logistics has resulted from the increase in the quantity of returns. This increase is at least in part due to the ease and popularity of Internet sales. Many modern companies have adopted the policy of allowing returns if customers are dissatisfied with their purchases and are increasingly viewing reverse flows as a value stream.

Reasons for Returns

Generally, the flow of returned product includes items for repair, refurbishment, resale, or in extreme cases, disposal. Customers and businesses may decide to return goods back through the supply chain for a number of reasons including:

- Failed, defective, or damaged products
- Unwanted products
- Obsolete products, or those that are expired or near the end of their shelf life
- Products recalled due to quality or safety defects
- Apparel merchandise purchased online that does not fit



Figure 24. Damaged product. Developed by LINCS in Supply Chain Management Consortium.

Handling these different types of customer returns can positively or negatively impact the customer experience; therefore, it is crucial returns are handled as efficiently as possible. For example, to create a positive experience many large retailers have made processing returns promptly a key part of their customer service strategy to retain customers.

Unit 2: The Customer Return Process

The customer returns process can include repairing products and then returning them to customers, placing the material back into stock, or refurbishing items for resale. The returns process is an important part of the many functions that typically occur in warehouses.



Customer Return Options

When customers receive items from companies, they may decide to return them because they are not satisfied with the products or because they wish to use different products for their own reasons. If this process is difficult or time-consuming, it may result in losing future business from frustrated customers.

The returns process can be made easier for customers, however, via return labels for customers to include with any items they are shipping for return purposes. Some firms make this label available electronically when customers ask to return their purchases. Amazon, for instance, provides an electronic shipping label that is printed out and attached to the products being returned.

Having return labels helps speed up the returns process and helps make it easier for customers. Typically, return labels include customer order information that is embedded in a barcode, which is used to inform customers when the products are received back in the warehouse. Receiving products in the warehouse could also trigger replacements to be manufactured or picked or credits to be processed.

Return material authorization (RMA) forms can also be used by companies in the returns process. These forms are used to authorize product replacements or refunds. To use such a form, customers contact the company that provided the products, receive authorization to return the product, and are given an RMA number. This number is then included in the packaging of the returned products and is used to authorize refunds from product providers. Many firms have automated this process by electronically providing a packing slip with an RMA number that can be printed off to be included with any products that are returned.

Warehouse Operations

In warehouses, organizing the returns process can help speed up the flow and disposition of returned goods. For example, having a location in warehouses specifically for returns processing can help to ensure a more efficient returns process because only returned items will be placed in this area for further processing.

Refund, Restock, Refurbish

When items are returned, they are inspected to determine their quality and condition. If they are covered by a return policy and are found to be sub-standard, then replacements or refunds are issued to customers. If items can be repaired, they could be resold as “like new” or refurbished, possibly with a manufacturer’s warranty.

In some cases, the repair operations might take place in a warehouse, depending on the nature of the repair. In other



Figure 25. Return label. Developed by LINCS in Supply Chain Management Consortium.



Figure 26. Refund, restock, refurbish. Developed by LINCS in Supply Chain Management Consortium.



cases, simple cosmetic imperfections can be repaired and the items can be sold at prices lower than new versions of the same item in order to generate revenue.



For example...



A **third-party logistics provider (3PL)** refurbishes cell phones. The company inspects returned cell phones to determine if they should be scrapped or refurbished. If inspection indicates that refurbishing is possible, then the company will refurbish the phone and then sell it at a lower price.

Recycling

Different countries have different rules and regulations about how logistics and reverse logistics impact the environment. This, in turn, has specific implications about the disposal of items and packaging in the reverse logistics flow and how these items affect the environment. For example, batteries contain toxic elements that can negatively impact the environment if they are simply thrown into the regular waste management system after use. As a result, many firms offer recycling programs for these types of toxic items.

Returns Management Systems

Returns can be a complex process because of how they impact physical inventory, electronic inventory, and accounting systems. Returned items need to be examined and decisions need to be made regarding returning products as they are to storage, repairing products and returning them either to storage or back to customers, or scrapping products. Items must also be identified, assigned to a customer or an account, assigned a disposition, and physically sorted for processing.

Specialized **returns management systems**, whether part of a warehouse management system or operating as a standalone system, can support the returns process to make this process more efficient. These systems and associated technology include:



Handheld scanners

As radio frequency equipment has proven to be useful in the warehouse environment, this technology is especially useful in the returns process.



Figure 27. Handheld scanner. Developed by LINCS in Supply Chain Management Consortium.

Interface with warehouse management systems

Returns processing should be integrated into an existing warehouse management system. This allows for real-time inventory control, immediate inventory allocation, rapid picking from the returns area, and cross-docking to a shipping dock.



Figure 28. Warehouse. Developed by LINCS in Supply Chain Management Consortium.

Interface with accounting systems

Any data collected about returned merchandise should be made available to accounting systems to serve as the basis for credit processing. This technology can be used to ensure credits are issued only after merchandise is inspected. It also reduces opportunities for crediting errors, which can happen more easily in manual systems.



Figure 29. Accounting for returns. Developed by LINCS in Supply Chain Management Consortium.

Stages in the Customer Returns Process

Within a distribution center, the various stages in the customer returns process include:

Stage 1



Figure 30. Return material authorization. Developed by LINCS in Supply Chain Management Consortium.

Return Authorization: Customers obtain an RMA from customer service that approves the return and provides shipping and return instructions



Stage 2



*Figure 31. Receipt of goods.
Developed by LINCS in Supply Chain
Management Consortium.*

Receipt: Products are returned by customers and received by warehouses

Stage 3



*Figure 32. Sorting and staging.
Developed by LINCS in Supply Chain
Management Consortium.*

Sort and Stage: Products are sorted according to the nature of returns and are staged for returns processing

Stage 4



*Figure 33. Processing and analysis.
Developed by LINCS in Supply Chain
Management Consortium.*

Processing and Analysis: Information is entered into companies' data systems regarding the reason(s) for the returns and the nature of the items; customers are also credited for their returns at this stage

Stage 5



*Figure 34. Disposition activities.
Developed by LINCS in Supply Chain
Management Consortium.*

Disposition Activities: Decisions are made about what to do with returned items, which can be scrapped, repaired and returned, or replaced into inventory

After-Sale Warranty Process

An integral part of the returns process is managing the **after-sale warranty process**. This process includes inspecting, sorting, handling disposition, and managing the enforcement of the warranty



program for returned products. Sometimes companies use 3PLs to perform some or all of these procedures. A 3PL typically provides a range of services, including warehousing, transportation, and other logistics-related services. Firms may decide to outsource their logistics activities to these 3PLs to allow them to concentrate on their core competencies, reduce costs, and leverage the logistics-related assets and information technology of 3PLs.

Unit 3: Industry Differences and Best Practices

Many firms have reverse logistics processes, but they tend to differ based on the types of industries in which these firms operate. Additionally, learning from experience and making improvements allow firms to have several established good practices in reverse logistics.

Industry Differences in Reverse Logistics



For example...



Figure 35. Fashion industry. Developed by LINCS in Supply Chain Management Consortium.

Differences exist among industries in a number areas, including the nature of returns and the types of products returned. For example, in the retail fashion industry, returns are common and often relate to ill-fitting sizes or customers simply changing their minds. In this industry, products can often be placed directly back into stock for resale.

In the pharmaceuticals industry, however, strict rules and regulations apply for batch lot control. Additionally, products' ages and expiration dates govern the use of many products, particularly in the food industry. In these cases, returns will often be scrapped or disposed of in a controlled manner. Regardless of the nature of returns and the products involved, effective management of customer returns is a vital part of companies' commitment to ongoing excellence in customer service.



Figure 36. Pharmaceutical industry. Developed by LINCS in Supply Chain Management Consortium.

Best Practices in Reverse Logistics

A **best practice** is a way of doing things that, through experience and research, has been shown to lead to a highly desired result. A best practice can mean that not only is something the best way to complete a task but also that this will always be the case; it also describes the best way to do something at a given point in time. As time goes by and best practices evolve, they are known as good practices at very detailed levels. Best practices are the focus to achieve ultimate goals, while good practices should be emphasized and used every day.

The following are recognized as best practices in customer returns:

- **Reduction of cycle lead times:** Analyzing existing processes to improve them and to reduce



- time and resources expended in the customer returns process
- **Information systems and technology:** Developing and maintaining effective information systems and technology to support customer returns
- **Organization for returns:** Ensuring that proper returns processes are in place to facilitate the rapid flow of goods and returns
- **Layout:** Ensuring the returns process is considered in the layout and design of a warehouse or distribution center
- **Asset recovery:** Promptly disposing of returned items to improve asset utilization
- **Efficient returns processes and procedures:** Maintaining efficient returns processes after product return classification

Unit 4: Key Metrics Used to Assess the Returns Process

To help ensure returns functions are carried out proficiently and correctly, key measures must be in place. Many key metrics can assess the effectiveness and efficiency of the returns process, including:

- ✓ Length of time to process returned products
- ✓ Volume and value of products reclaimed and resold
- ✓ Percentage of material recycled
- ✓ Waste produced in the returns process, whether wasted time, wasted effort, or wasted materials
- ✓ Percentage of costs recovered
- ✓ Handling cost per return or item

For example...

A major manufacturer of computers looked for an outside company to manage its reverse logistics program and identified a 3PL. The 3PL developed a specific program for the computer manufacturer in which freight is dispatched to an authorized carrier and picked up within one business day. Returns are then routed to a cross-dock where shipments are verified and returned to their destination before being returned to the customers themselves. This whole process is completed within specified metrics, such as time allotted to pick up the goods and time allocated to returning goods to customers.



*Figure 37. Monitor.
Developed by LINCS in
Supply Chain Management
Consortium.*

Learning Block 4 Summary

Reverse logistics refers to the return of products in the supply chain. If products are not required by customers who received them or products are defective, customers can return the products in a reverse flow of logistics. This process could include shipping, testing, repairing, recycling, or disposing of products. A number of keys ensure the productive flow of returned goods into distribution facilities.

