All courses are prepared using many books and websites. Mainly: https://www.logisticsbureau.com/kpi-key-performance-indicator/

"knowledge is found to be shared, but with respecting its sources"

COURSE 7: Reverse logistics

What Are Reverse Logistics?

Reverse logistics refer to monitoring the life-cycle of your products after they arrive at the end consumer. This could include how your product could potentially be reused, how it should be properly disposed of after use, and any other way where your expired product can create value.

The reverse logistics that directly impact supply chains the most are the return of products from the end consumer back to the manufacturer. For the rest of the article, we'll explain more abiut this process, and ways you can use it to your advantage.

The Return of Goods Sold

Most supply chains will stop measuring the success of their goods once the product is shipped and is delivered on time. While this is can be an accurate measurement of customer satisfaction and profit, it doesn't account for all cases.

What if your customer receives an incomplete order? What if they feel the item they ordered doesn't match the product description? Or what if the customer just changes their mind about their purchase? In all three of these likely scenarios, the return of your product qualifies as reverse logistics.

Think about the different phases a product return goes through at your company. These could include:

- The physical shipping of the returned product.
- Quality testing the returned product to replicate the error or identify the flaw.
- Documenting any problems with the returned item.
- The disassembling, repairing, recycling, or restocking of the returned item.

Managing the reverse travel of your product back into the supply chain can help you avoid making the same mistake twice and allow you to reutilize as many components of your product as possible.

Monitoring the Flow of Reverse Logistics in Your Supply Chain

There are four key supply chain analytics that can help you understand the flow of returned products entering your supply chain. They are as follows:

1. Volume. Are the same items being returned over and over? Is this happening in large volumes? Answer yes to either of these questions and you've probably got a larger problem than just a few faulty units. You may need to consider a recall or an overhaul of your production process.

2. Percent of Sales. What percentage of your sales are lost to product returns? And how many of these products can be reincorporated into your supply chain via reverse logistics? According to a study by the Aberdeen Group, the average manufacturing company will spend 9% - 15% of total revenue on the returns process. What can you do to minimize these losses of revenue? How can you turn a profit on a loose?

3. Condition the Product is Returned In. Is the product failing after a specific operation? Can you determine any patterns of failure among the returned product? This is where quality assurance (QA) and error reproduction are important. You want to figure out what went wrong so you can adapt and correct the problem before it happens again.

4. Financial Value. Without monitoring and managing your reverse logistics, your company could be losing millions of dollars in potential value. Consider failed electronics that are returned to their manufacturer. According to "Recovering Lost Profits by Improving Reverse Logistics," electronics sold in secondary-markets "represent an estimated $15 billion (sold) in the United States." These electronic companies manage to turn product failure into new profits by utilizing reverse logistics.

The Benefits of an Efficient Reverse Logistics Systems

While many companies consider the return process to be a necessary evil that shouldn't be noticed, companies that implement an effective reverse logistics workflow can reap several benefits.

Some of these benefits are:

- ***Reduced costs.*** By planning ahead for returns and making the return order right, you can reduce related costs (administration, shipping, transportation, tech support, QA, etc.)
- ***Faster service.*** This refers to the original shipping of goods and the return / reimbursement of goods. Quickly refunding or replacing goods can help restore a customer's faith in a brand.
- ***Customer retention.*** Dealing with errors is just as important as making sales. If a customer had a bad experience with your product, you have to make it right. Fulfilment blunders can create educational opportunities. Learn how to keep your customers happy and engaged with your company - even after you've made a mistake.
- ***Reduced losses and unplanned profits.*** Recover the loss of investment in your failed product by fixing and restocking the unit, scrapping it for parts, or repurposing it in a secondary market. With a good reverse logistics program in place, you don't have to leave money on the table. Take a product that would otherwise just cost your company money and turn it into an unforeseen asset

REVERSE LOGISTICS IN FEW LINES

What is reverse logistics?

Reverse logistics is the opposite of the standard supply chain. The goods move from the end user back to the seller or manufacturer. It can include returns from e-commerce and retail, as well as components for refurbishing and remanufacturing. The products may be resold or disposed of permanently.

What is returns management?

Returns management is the supply chain management process companies use for all activities associated with returns, reverse logistics, gatekeeping, and avoidance within the firm and across all elements of the supply chain. It's the equivalent of managing outbound shipments.

When is reverse logistics used?

Reverse logistics is used when goods are moved from their final destination to another location to recapture value or for final disposal. The product may be returned because it doesn't fit the customer's needs or it has reached the end of its service life.

What are the types of reverse logistics?

Reverse logistics can relate to any of the following activities after the initial purchase:

- Returns
- Returns avoidance
- Remanufacturing
- Refurbishing
- Packaging
- Unsold goods
- End-of-life
- Delivery Failure
- Rentals & leasing
- Repairs & maintenance

What is meant by integrated logistics?

Integrated logistics support (ILS) relates to the life cycle of a system or product. The system or product is designed to last longer with less support and the cost of support is considered in the product design. An Integrated logistics system is designed for reliability, availability, maintainability and testability, as well as safety.

What is inbound and outbound logistics?

Inbound logistics refers to the transport, storage, and delivery of goods coming into a business. Outbound logistics refers to the shipment of products to end users or distribution centers. It is associated with the concept of supply chain management, as managers work to maximize the efficiency of distribution networks while minimizing transport and storage costs.

What is reverse flow in the supply chain?

Reverse flow is another term for reverse logistics in the supply chain. This includes planning, implementing and controlling the efficient inbound flow, as well as the storage of goods and related information to recover value or proper disposal.

What is reverse supply chain vs. reverse logistics?

Reverse supply chain refers to the movement of goods from customer to vendor or at least one step backward up the supply chain. Returning an electric motor from a commercial supply house back to the manufacturer because of a packaging defect is an example of reverse logistics that doesn't involve the end user. This is the reverse of the traditional supply chain movement of products from the vendor to the customer. Reverse logistics is a higher level perspective that includes the overall process of planning, implementing and controlling the inbound flow and storage of secondary goods and their related information.

How does reverse logistics impact supply chain management?

Companies must plan and execute strategies to manage products beyond manufacturing and the final sale. These processes can include repair, warranty recovery, redistribution, value recovery, end-of-life recycling or any combination of these activities. Depending on the volume, a separate reverse supply chain may be established.

How can reverse logistics improve supply chain efficiency?

Creating a reverse logistics strategy allows outbound and reverse logistics to function as efficiently as possible. Trying to shoehorn reverse logistics into the traditional supply chain framework can lead to bottlenecks and customer dissatisfaction.

What is a closed-loop supply chain?

A closed-loop supply chain is one that generates zero waste. All materials are entirely reused, recycled, or composted. The term includes corporate take-back programs, where producers of a product also take responsibility for its disposal.

What is the difference between a closed-loop supply chain and reverse logistics?

A closed loop supply chain is when you recover a product from a customer in exchange for value and recycle the product for later use. This is common in automotive components such as starter or alternator cores, which are then refurbished and resold. The repair shop also receives a financial incentive for turning in the core. Reverse logistics may include a closed loop system, but it is also the return of items from consumers or product overstocks as well as the collection of recyclable materials to eliminate waste.

Why is reverse logistics important to implement?

The primary goal of reverse logistics is to recover value from assets to increase revenue and reduce expenses. Establishing a reverse logistics strategy can also boost the efficiency of a traditional supply chain by separating the operations.

Why is reverse logistics needed?

Reverse logistics completes the product lifecycle to support reuse and repurposing of products and materials. You can recapture value by reselling items as is, refurbishing them or selling to a discount liquidator. Some materials can be recycled or sent for final disposal in an environmentally responsible manner.

How does reverse logistics work?

The process depends on the business, but essentially reverse logistics involves any process or management after the sale of the product. It starts with a reason for a return, and the customer contacts the appropriate party to initiate the return. For many retail products, the manufacturer asks the end user to

contact them directly rather than returning the product to the store. The responsible party arranges for transportation of the returned product, which could involved sending a shipping label for a parcel pickup, or arranging for truck pickup for larger items. The returned item should be have the same level of visibility that an outbound package has.

What is the reverse logistics process?

The process will vary widely among industries. For example, retailers may bundle pallets of returned garments for shipment to a liquidator. A machine tool manufacturer may accept tools for re-sharpening and offer a core return discount. An e-commerce retailer may accept returned goods at a separate facility or specific docks for restocking or liquidation. Each item should be tracked with the same level of visibility and transparency as an outbound shipment.

What is the difference between reverse logistics and forward logistics?

Forward logistics, or traditional logistics, is about getting your product to market and uses automated information systems to track items. The forward supply chain encompasses product development, manufacturing, distribution and fulfillment to end users. Reverse logistics is for all operations related to moving goods from the end user to recapture value from the products or for proper disposal.

What are the components of reverse logistics?

The three components of reverse logistics management consist of Return Policy and Procedure (RPP), Remanufacturing or Refurbishment (ROR) and Waste disposal (WAD). RPP is the company's approach to handling returns that is shared with customers and employees that covers aspects such as how long after purchase a return is accepted, who is responsible for shipping and whether there's a restocking fee. ROR covers what happens to a return after it is accepted. Some products like automotive or manufacturing components are remanufactured and sold again. Some are simply refurbished, such as a product put into new packaging, or restocked on the shelves. For some products, WAD comes into play for disposal as the products are not suitable or not permitted to be resold after return.

What is the cost of implementing a reverse logistics plan?

Reverse logistics varies depending on the scope of the program, the 3PL provider and the needs of the business. Each solution is customized based on the client's needs. Without a reverse logistics strategy, a

company will miss out on potential asset recovery revenue and customer satisfaction because it does not have a system in place for recycling, reusing, or safely disposing of returned products. A successful reverse logistics solution increases customer satisfaction and brand loyalty because customers are better able to make returns or get a replacement product within a reasonable time.

What are the objectives of reverse logistics?

A well-planned, customized reverse logistics policy can reduce storage and distribution costs, improve a company's reputation, satisfy customer needs and create a more sustainable supply chain. Many companies use their return policies as a competitive differentiator.

What are the benefits of reverse logistics?

With a comprehensive reverse logistics strategy, you can reduce administrative, transportation and support costs while at the same time increasing product velocity. A robust reverse logistics program is a key factor in customer satisfaction, which leads to increased market share and improved retention levels. A supply chain will operate most efficiently when it's optimized in both directions.

How does reverse logistics reduce risk to the business?

A sustainable reverse logistics strategy provides a range of benefits, from eliminating fines from government organizations for improper disposal to improving the public perception of the company as well as recovering value from assets. A reverse logistics strategy should include plans to deal with end-of-life equipment, recalls, remanufacturing and equipment failures. With a system in place, the company can respond quickly, reducing the risk of litigation, regulatory action and customer dissatisfaction.

Are there any disadvantages in reverse logistics?

Managing reverse logistics is a critical component of supply chains. The primary disadvantage comes from a failure to balance costs vs. benefits and let costs expand beyond the value to the organization.

What are the challenges in reverse logistics?

One of the main challenges is to track the profitability of reverse logistics operations. In many cases, it doesn't make sense to ship products from the consumer back to the distribution center if the value of the product is less than the cost of shipping. Depending on the distribution model, a company may have to

work through dealers or distributors to manage returns. The company will need the infrastructure to track warranty and routing status and ensure any repair process is as cost-effective as possible.

What are the different strategies for reverse logistics?

One of the primary strategic questions is whether a company will handle reverse logistics with in-house resources or rely on a 3PL partner. Some companies use different 3PLs for outbound and reverse logistics. Or they may handle one direction in-house and outsource the other direction. It may also be efficient to segment returns by geographic regions, types or size of products and disposition of products. Those products that can be inspected and repaired for resale could follow one path, and products that will be bulk liquidated or disposed of could follow another route. The goal is to handle the returns as efficiently as possible to extract value from the assets.

How can reverse logistics be improved?

One of the best ways to handle reverse logistics is to minimize returns in the first place. That may require improvements to reduce damage in shipping. Returns policies could be tightened to disincentivize returns of low-value products. Lean processes can help identify problem areas to ensure quality products and delivery. Best practices include establishing a reverse logistics group to control all processes rather than operating through the outbound logistics group.

How can you successfully manage reverse logistics?

The key to success is to treat reverse logistics with the same level of strategy, management oversight and investment as outbound logistics. Treating it like an afterthought will cost you in the long run.

What is the best way to manage high volume returns?

Establishing a strategy and a separate reverse logistics chain is the best way to manage high volume. By working with an experienced reverse logistics partner, you can enjoy the benefits of specialized knowledge and attention to detail while not interfering with your outbound fulfillment operations.

How can reverse logistics create value?

You can increase customer satisfaction with an easy-to-use return process and policy, increasing customer loyalty and repeat business. You can recover value from assets that might otherwise be lost, reducing the need for additional manufacturing while keeping items in stock.

What can sellers do to reverse the cost of reverse logistics?

Sellers should be aware of return policies in online marketplaces and ensure they disclose all the correct details about products in product descriptions. Documentation of orders shipped and received is critical to prevent fraudulent returns. Inspect the returned merchandise to ensure it meets your standards for resale. Identify the source of high product return rates.

How can reverse logistics increase customer satisfaction?

Experts say as much as 20 percent of everything purchased will be returned. Returns are an expected part of commerce today, so a lack of a comprehensive program will disappoint consumers, leading to poor reviews and loss of market share. Customers are more apt to purchase if they understand the return policy, even if they don't return the product. A return process backed by a reverse logistics system gives them peace of mind.

How can reverse logistics contribute to a lean supply chain?

The goal of lean principles is to remove waste from operations, so reverse logistics is an ideal application for this philosophy. The most effective lean solution would be to design the product and deliver it so that the customer will not return it. Lean principles can be applied to planning, implementing and controlling the efficient flow of materials and information from the point of return back to the origin point for the refurbishing, capturing value or proper disposal.

How does reverse logistics contribute to sustainability?

Reverse logistics, which helps reduce harmful emissions and energy usage, is intrinsically aligned with environmental sustainability. Some companies have zero-landfill goals and strive to work with a logistics partner that can provide proper recycling and disposal of returned products.

Can outsourcing reverse logistics create a streamlined reverse logistics process?

Outsourcing reverse logistics to a 3PL can create a streamlined process focused on reverse logistics. It's not an afterthought to the outbound logistic flow but rather its own process with management oversight.

How does reverse logistics work in the pharmaceutical industry?

Typically manufacturers control the reverse logistics flow in the pharmaceutical industry due to the regulatory concerns for prescription medications. If a product is out of date or is a temperature-controlled product like insulin that experiences a temperature excursion, it will be returned to the manufacturer or its designated representative for disposal.

What are the best practices for reverse logistics of medication?

Tracking, tracing, and transparency are among the best practices for medication. Because of the nature of the products, a chain of custody is required to satisfy regulatory burdens. These items are often considered hazardous waste and must be handled accordingly. Under FDA regulations that came out in March 2019, retail pharmacies will have more flexibility from certain hazardous waste requirements, but failure to comply with the regulations could result in fines.

How does reverse logistics work in service industries?

The process of reverse logistics is the same for both the manufacturing and service industries. The goal is to get the broken part back to the point where it can be repaired or reused. In the service industry, there are opportunities for refunds, warranty work, etc. on non-tangible goods and services.

What is the difference in reverse logistics for the service and manufacturing industries?

The difference in reverse logistics in service and manufacturing happens after the part or item is repaired. In the service industry, the part can be repaired and hold the same value and be used the same as a brand new part. In manufacturing, the refurbished part can lose its value. Service industries will provide refunds, credits, warranty work and other activities to ensure excellent customer relations.

What is reverse logistics in retail?

For retailers, reverse logistics typically begins at the customer service desk when a customer brings back an item they have purchased but no longer want. The retailer must move products back up the supply chain to recapture value. Some products could simply be reshelved. Other products must go back to a

distribution point for fulfillment or sent to a liquidation center. In some cases, the product may have to be thrown away or recycled. The customer expects to have the purchase price refunded quickly and without question.

How should reverse logistics be handled for retail?

Reverse logistics begins with the returns policy and training for store personnel. There should be procedures in place to guide store staff on the disposition for the item so that returns are handled properly before being restocked or redistributed. For many retailers, their returns policy is a key competitive differentiator. Managers must have insights into the cost/benefit analysis for moving items through the reverse logistics pipeline. Establish a gatekeeping function to identify how, and which, products enter the return stream.

How should e-Commerce companies manage their reverse logistics to make it a low-cost transaction?

First, create processes and products that lower the overall return rate. Many of the same technologies used to optimize outbound shipping can be used with reverse logistics. Each return parcel should be directed and tracked to the right destination, whether it's the point of origin, another merchant, or another distribution point. Understand your reverse shipping and handling costs so you can make the best decisions on the returns.

What are some key factors to be considered while planning for reverse logistics in an e-commerce set up?

The days of the one-way supply chain are long gone. Consumers of all kinds consider returns a crucial part of any value proposition. For e-commerce and retail sellers, quick and easy returns are a cost of doing business. So it's critical to understand your return rate across products, the cost of gathering and shipping returns, and the potential value that can be recovered from returned products. Establishing a sorting system to identify returns based on their disposition is vital. Understand the value of the items — for some low-value items, the cost of return handling outweighs any potential profit from recovery.

What is the best way of handling reverse logistics in the e-retail marketplace?

Handle reverse logistics to minimize friction for customers while analyzing the root cause for returns. You must have a viable system in place to handle returns processing and disposition. You must have the

process in place before you can begin to understand the reasons driving the return rate. Only then can you can use data to guide changes that can reduce returns effectively.