

GETTING TO GRIPS WITH THE REVERSE LOGISTICS CHALLENGE

Market Trends and Observations

Before eCommerce!

- Reverse Logistics existed before eCommerce!
- Widely used during pharmaceutical product recalls in the 80's, removing tainted products from the shelves.
- Traditionally Reverse Logistics has aligned more closely with some sectors more than others:
 - Automotive – spare parts – continues to grow as the average age of cars increase
 - Magazines and print with short shelf lives
 - Tech sector need – high volume, low mix with Tech being less of a consumable item and having higher value
- Reverse Logistics wasn't as complex as it is today
 - No online purchasing or returns - we shopped and returned to store
 - No GDPR
 - Less environmental concern



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Reverse Logistics Today!

- Today, everyone has a different view of reverse logistics
 - reflects growth, change and relative immaturity – but invariably it varies by sector and company
- Everything that happens after the point of sale
- Reverse Logistics being recognised as a multi-sector, multi-skill B2B and B2C challenge, with huge potential

Reverse Logistics / Repair / Refurbishment	Logistics / Distribution / Supply Chain
ITAD / ITAM	Etail / Retail
OEM	Financial / Lease / Insurance
EMS & ODM	Managed Services
SaaS / IoT	Automotive
Medical	Telecoms

Growth of eCommerce



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- Consumer habits have changed
 - Immediate needs – we cannot be without!
 - Entitlement culture – ‘try and return’ at no charge – deliver where I want it
- eCommerce has raised the Reverse Logistics profile through the challenges it creates
 - Getting products back into the supply chain – stranded assets
 - Creating new business growth – trading returned product

Return

Replace

Refurbish

Remarket

Restock

Spares

Redeploy

Scrap

Repair

Recycle

Remanufacture

lifecycle

Recover

Resell

- Absolutnet described RL as:
 - Retail's \$400 Billion a year elephant in the room to hit tipping point as returns set to hit \$400 billion in 2017
 - UPS estimated it would be handling **1 million** returns a day in January 2016
 - In the UK **23%** of all purchases made in 2018 were returned
- On average, Online shoppers return close to **30%**
- **44%** of retailers say *margins are strongly impacted* by returns handling
- **62%** of consumers are more likely to purchase online if they can return an item in store
 - Omni channel options – looking for the return experience, not the store shopping experience

Construction is thriving!

- Now, “**reverse logistics**,” *a fancy term for dealing with e-commerce returns*, is the **No. 1 new user of warehouse space** in the United States, taking up to **700 million square feet** nationally, according to **CBRE**

- Most industries face *very high costs to process returns*
- Traditional reverse supply chain is long and complicated, with goods traveling from *consumer to retailer to vendor to liquidator to wholesaler to reseller and finally, to a secondary buyer.*
- Items typically need to be *reviewed* and *assessed* for fault and/or damage, then be *repackaged* and *distributed* to a location where they can be *resold* or *reworked*.
- For retailers, this is a **\$1.75 trillion** and many retailers *do not have adequate systems* in place to manage this flood of returned product.

What is the Reverse Logistics Challenge

eCommerce supply chains are designed to get the product to the customer

Returns are:

- High Volume
- High Mix
- Open, not original packaging
- Require manual inspection, sortation
- Labour Intensive
- Fragmented supply chains – omni channel
- Profit Damaging
- Negative Customer Experience
 - **A customer who is unhappy is a lot more expensive** than we could ever imagine, there's more to be lost by trying to penalize them than there is to be gained – *Home Depot*
 - *A great returns experience can drive customer loyalty – Narvar*
- ***Unpredictable (difficult to automate)***
- ***Lacking Data & software***

- Reverse Logistics provides opportunities to *innovate* and *differentiate*
- Returns solutions are becoming a part of the consumer's shopping behaviour

*We know that about **86 percent of consumers say the returns process influences their buying decision online, so we know it's very impactful," said Erik Caldwell, XPO Logistics***

Data Analysis



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- **ZigZag** helps retailers manage & resell their returned stock. They offer to refurbish, locally redistribute, destroy or resell stock
- Growing within fashion but applicable to all sectors
- Provides visibility & tracking – intelligent disposition & consolidation based on data
 - Apps, photos, AI
- Information on volume of returns, condition of the products, reason for return, the percentage of sales and the £€\$ amount
- Data Analysis to improve predictability



Data Analysis



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- B-Stock – B2B auction site enabling the sale of goods to business buyers
- Data gathering across multiple industries
 - *Which markets are buying what products for what price?*
- Intelligent disposition and routing based on real-time market data



- **neuronal network** solution, consisting of 16 layers, based on a **machine learning framework**
- The neuronal network focuses on **image recognition** and is used in the warehouse to quickly identify returned items
- **How does it work?** The IT solution scans the item and compares the taken picture with the database; the return employee now receives information from the system how probable it is that this item can be assigned to a specific article number
- **Background:** The neuronal network has been trained with **14 mil pictures, 20,000 labels** and additional information like the weight



Amazon



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- Amazon has stated they will become the market leader in returns with *Amazon Renewed*
- Amazon shipped over 5 billion packages in 2017 with Prime alone and now has over 600 brick and mortar locations where customers can return merchandise
 - Bringing returns to the high street



Innovating sectors



- IoT
 - 28 billion connected devices worldwide by 2021
 - Preventative maintenance and intelligent diagnostics
- RFID
 - Increase processing speed with automation potential

- The Reverse Logistics challenge keeps on getting bigger
- The Market is still immature but is innovating
- Data is leading to efficiency and predictability
- Understanding and moulding customer behaviour will lead to greater efficiencies





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Thank you