Future-proof your reverse logistics

Did your supply chain meet the challenge of post-Christmas returns?

KPMG International

kpmg.com/operations
Up your game when it comes to your customers

Picture this scenario: the shoes that you ordered at lunchtime have arrived just in time for you to attend your office Christmas party. However, as you open the box, you experience immediate disappointment when you realize that you have received the wrong size. With only 2 hours remaining until the party commences, you scan the box, take a photo of the shoes and initiate via the retailers online webshop a return and replacement order, making sure to specify the correct size required for the replacement order.

As the replacement order is received by the retailer, the customer service roboter asks you a few basic questions which allow the retailer to start a digital returns diagnosis. The information gathered by the roboter is automatically shared with the retailer’s logistics service provider who uses the information to determine how best to manage the return (repackage and return to stock, repair, scrap etc). It also allows them to simultaneously and automatically plan the logistics flow to efficiently manage the outbound and inbound flows they have under contract, thereby optimizing the overall logistics network and mitigating the cost of managing returns.

Not long after you make the replacement order, a bicycle courier (sourced through the retailer’s own crowd sourcing software) arrives at your office to collect the product to be returned. He scans the packaging and is then directed to take the shoes to the nearest freight collection point where the shoes are consolidated with other return orders and transported (via a vehicle that is linked to advanced planning software that dynamically schedules freight routes). The vehicle has been advised of the most efficient route by which to return the shoes and they are transported to a fully automated returns warehouse (currently processing around 10,000 returns per day for 10 different footwear and apparel retailers.) The returned shoes are automatically scanned, checked for damage and counterfeit, and then placed back into stock for the online store.

At the same time that the return is being managed, the retailer (having a fully integrated order management capability that handles both returns and the replacement orders simultaneously) is urgently picking and despatching your correctly-sized shoes. The new order is generated and despatched. However, ‘due to time constraints’, you have updated the delivery location and time via App so that the replacement shoes are scheduled to arrive at the Christmas party venue at roughly the same time that you arrive in your car.

The retailer shares the adjusted delivery location and time with the logistics service provider, who utilizes their advanced planning and scheduling capabilities to efficiently re-route the delivery driver to supply your shoes. You slip into your perfect pair of new shoes and arrive at the Christmas party just in time.

An industry reality

In reality, today’s returns represent a growing cost of doing business and present a number of unique challenges to companies involved in the sale, manufacturing, storage and distribution of goods through often complex domestic and international supply chains and channel partners. While the returns process may seem to represent only a small component of the physical logistics and transport operations of a company, the impact of failing to execute returns management efficiently will significantly impact profitability and market share. For this reason, the pressure is on all retailers and manufacturers to develop reverse logistics channel management and service strategies that can minimize return costs while managing profitability, customer service and reputational risk.
Contents

Understanding the true 'cost to serve' 04

Reverse logistic approaches 11

Criteria to consider when choosing a reverse logistics service provider 12

Conclusion 15
Understanding the true 'cost to serve'

There are certain industry sectors like high-tech, automotive parts, pharmaceuticals, medical devices and print media, where product and component returns are just a part of the everyday transaction cycle. Within the publishing and greeting cards industry, it is normal to expect that around 20%\(^1\) of all product will be returned. Companies from within these industries factor the cost of returns into their pricing strategies and are good at managing the efficiency of flows for both the outbound and return supply chains, thereby helping to control the operational cost base. However, unlike companies from within these industries, many retailers, Fast Moving Consumer Goods manufacturers (FMCGs) and other manufacturing sectors are not as focused on the returned goods supply chain, thereby unknowingly absorbing the cost of their reverse logistics activities into their ‘business as usual’ cost base. Automakers have adopted closed loop manufacturing strategies for returns of used automotive parts (cores) for remanufacturing purposes. The United States of America (US) has a low 4-6%\(^2\) rate of returns for automotive parts, though 90-95%\(^2\) of all automobile starters and alternators sold for replacement are remanufactured. The US Auto Parts Remanufacturers Association estimates the market for remanufactured parts to be $36 billion USD.

Nevertheless, leakages still occur as it is often easier to not return cores and this is mitigated by automakers deploying a single carrier to facilitate and handle part returns. According to a recent UPS study, the average manufacturer will spend between 9% to 15% of total revenue in managing returns\(^3\). The cost of these returns ultimately erodes margin – in fact, many organisations lack an understanding of their exposure to returns, nor do they comprehend the impact that returns have on their brand and reputation with their customers.

Historically, reverse logistics volumes were insignificant for most retailers and manufacturers, but recently these organizations have begun to face an unprecedented rise in the volume of product returns. Consumers worldwide buy and then return a staggering $642.6 billion USD of goods annually. What is quite staggering is that Gartner research shows that only 48% of what is returned can be resold at full price (in a survey of 300 retailers) – a double hit to the bottom line – the unplanned cost of reverse logistics and the reduced value/margin for those items to be resold. Andria Cheng, in a recent Market Watch article, details that product returns are a bigger headache for clothing retailers than food & drug retailers and hard goods retailers (including electronics)\(^4\). Returns account for an estimated 4.4% of $14.5 trillion USD in global retail sales, according to IHL in Cheng’s report\(^5\). Clothing retailers see an average of 10% of their sales returned, the highest among retail segments. Electronics, books and other hard-goods retailers follow with an average of 8.8% returns.\(^4\) Most of those expect returns to grow as they increase online sales and increasingly offer free returns along with free shipping.

In the US alone, merchandise returns were valued at $260.5 billion USD in 2015, roughly 8% of total sales, according to the National Retail Federation\(^6\). Many companies are exposed to fast growing logistics costs as they have minimal visibility and exercise almost no control or an ability to mitigate these return flow costs. Despite the size of returned products as detailed above, the reverse logistics transaction cycle for many industries is considered to be outside of their core competency, so many companies outsource part or all of the function to their logistics service providers. These external processes are typically separate from the outbound customer delivery logistics flows and use different software, planning and infrastructure, effectively duplicating many elements within the supply chain.

Industry perspective

Attempts by many retailers and manufacturers to manage the reverse logistics activities through traditional forward logistics operations have revealed that this approach can

---

\(^1\) http://cerasis.com/2014/02/19/what-is-reverse-logistics/


\(^3\) Huang, Carla, 2019, Reverse Logistics: Recovering Lost Profits by Improving, UPS, USA. [https://www.ups.com/media/en/Reverse_Logistics_wp.pdf]


\(^5\) IHL Group is a global research and advisory firm for the retail and hospitality industries. www.ihservices.com

\(^6\) United States Industry’s largest advocacy organization which advances the industry through professional seminars, trade conferences, publications and educational activities. https://nrf.com/
often be costly, difficult to integrate and often results in a reduction in a company’s overall supply chain channel and service delivery performance. Companies that have adopted dedicated reverse logistics channels have tended to experience significant reductions in their overall logistics channel costs and improvements in their service delivery performance. Medical device, automotive and consumer electronics sectors witness considerably high returns each year but have a low uptake of dedicated reverse logistics channels.

Operational risks resulting from product returns are also compounded by seasonal changes. On average, returns volumes within the short holiday seasons in the United States like Thanksgiving and Christmas, roughly account for 24% of returns over the entire year, according to the National Retail Federation. As the rise of online shopping and free returns grows, this volume is expected to increase significantly. Retailers have unintentionally contributed to the increase of reverse logistics activities by their efforts to attract new customers when offering free returns of unwanted purchases. According to a recent KPMG survey, the ‘Omni-channel Retail Survey 2016’, up to 91% of returns are a direct result of retailers’ efforts to attract new customers through offering ‘free’ returns on unwanted purchases.

This is further compounded with environmental regulation trends impacting reverse logistics. The handling and disposition of product returns, components and packaging is a real concern for global companies. In the European Union, the WEEE (Waste Electrical & Electronic Equipment) and RoHS (Restriction of Hazardous Substances) restrict the use of hazardous substances in electrical and electronic equipment and provides for their collection, recycling and reuse. Similar laws are under development in the United States and other countries. Instead of carting products to landfills, companies are recovering the value of the assets through a variety of other paths, such as returning to stock, donations, secondary market sales and recycling.

In a recent online Quartz article titled “Returned gifts are creating an environmental disaster” it stated that many of those returns aren’t going to make it back into store inventory and onto shelves. Instead, they will rack up a giant carbon footprint as they wind their way through a network of middlemen and resellers and, at each step, a share of those goods will be discarded in landfills. The article interviewed Tobin Moore, cofounder and CEO of Optoro (a technology company focused on improving the ‘reverse logistics’ of consumer returns), “It’s a huge environmental impact - it’s over 4 billion pounds of [landfill] waste generated a year in the US from reverse logistics.”

The 2015 Walker Sands Future of Retail study illustrates that free shipping entices consumers to spend more online. This study suggests that by offering free returns, consumers are twice as likely to spend more than $1,000 USD online. It appears that free returns and free shipping are even more of a potent combination. For instance, the study found that free shipping and free returns are now more important to consumers than fast shipping. Specifically, 83% of the 1,400 consumers surveyed said free shipping would make them more likely to shop online. Similarly, 65% say free returns make them more likely to shop online. Moreover, in the US, free online returns have now become an expectation. 90% of all retailers are providing free delivery for at least some online purchases, up from 78% in 2014, HRC Retail Advisory told Bloomberg. While shipping costs are rising due to new pricing policies from UPS and FedEx, ‘free returns’ have to be baked into e-commerce fulfilment costs.

As both the KPMG and Walker Sands surveys reveal, customer friendly returns policies have contributed to the rapid growth in both online purchases and in-store traffic, which is a great outcome for retailers and manufacturers. However, returns volumes have risen sharply, and as the survey highlights, consumers are buying extra items purely to compare.

“Customers are deliberately over-ordering, causing intentional returns - almost a fifth of online fashion purchases include duplicates”

Iain Prince, Supply Chain Director, KPMG in the UK

---

8 KPMG Omni-channel Retail Survey 2016, KPMG, 2016
10 https://qz.com/873556/returned-gifts-are-creating-an-environmental-disaster/ (December 2016)
12 United States based Advisory Firm specialising in Retail Advisory
The "Omni-channel Retail Survey 2016" shows that 15% of all purchases and in particular, 23% of all fashion purchases included "intentional returns" for duplicate items purchased for the purpose of testing and then returned.

These survey results are similar to the e-commerce industry findings that described the 'high return rates as long being its Achilles heel, where one in three online purchases is returned. For online apparel purchases, the rate is closer to 40%.' As online shopping continues to gain momentum and grow in key markets, product returns are expected to also keep growing. However, with consumer behaviors similar to those already outlined (such as over-ordering), the reverse logistics costs may potentially grow at a rate that is much faster than sales growth rates and thereby eliminate all of the value being created through these e-commerce channel strategies.

### Market perspective

Within the key markets of Europe, Asia and North America, retailers have witnessed an increase in consumer preference to shop online through the use of smartphones and tablets, as more consumers are choosing to purchase via these devices. In China alone, retail websites sold over $493 billion USD worth of physical goods in 2015, an increase of 31.6%, according to data released by the National Bureau of Statistics in China. In 2015, Alibaba’s e-marketplaces represented more than $450 billion USD in online sales, which made it the largest e-commerce company in the entire Asia-Pacific region.

In other key Asian markets such as Japan and Korea, same-day and next-day deliveries have become the norm. Their biggest challenge now is with the fulfilment of both customer orders and the management of high return volumes - a logistical burden arising as consumers increasingly expect (and receive) free product returns as part of the convenient service. According to Hayley Silver, the latest Bizrate Insights survey highlights some interesting insights by generation: 19% of buyers surveyed say that same-day delivery is ‘important’ and 4% have considered not purchasing an item because same-day delivery wasn’t offered. When it comes to the importance of same-day delivery by generation, there is a clear decrease in importance as shoppers get older; nearly a third (30%) of millennials find same-day shipping important, while only 5% of seniors do. Delivery cost is more important to 74% of buyers, versus delivery timing (important to 26%).

### Impact on margin/profitability

Whilst retailers and FMCGs manufacturers have achieved sales growth underpinned by these growing online transactions, their margins were eroded as they struggled to identify and effectively manage their newest and biggest operational challenge - the cost of managing product returns. For many organizations, reverse logistics may well be the biggest operational challenge that they face during the 21st century.

Without sufficient focus on returns, retailers and manufacturers are also exposed to rises in working capital. As inventory becomes tied up in returns stockpiles, the overall cost becomes far greater than just the direct costs arising from the aforementioned operational inefficiencies. Whilst many supply chains have been optimized to ensure product flow to the customer meets service expectations, there has been little or no optimization or effective management of these return supply chain flows and operating models (e.g. how are return centers structured? – Hub and spoke, main return centers; how are return centers set-up? – co-located with plants/distribution centers (DCs) or independent from plants; what departments will be involved in returns? – Logistics, Product Development, Transportation).

The unpredictability of returns is a major challenge that impedes an organisation from effectively managing the reverse logistics process. Most find it extremely difficult to forecast what products will be returned, when the return flow is going to occur, where the return pick-up location will arise, the reason for the return (defective, unsatisfied but ok, didn’t fit, changed mind etc.). The unknown data points have an impact upon an organization’s capability to effectively plan for returns, restricting their ability to optimize network flows in order to keep associated costs as low as possible.

Most industries face very high costs to process returns as the 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 industry

---

14 Dunn, Chris, 2016, Why it’s time for Retailers to Embrace Online Returns (https://www.entrepreneur.com/article/246421)  
15 http://www.businessinsider.com/alibaba-has-an-ambitious-plan-to-handle-delivery-logistics-2016-7/?r=AU&IR=T  
16 Silver, Hayley, 2015, How important is same-day delivery to shoppers, Internet Retailer (https://www.intemetretailer.com/commentary/2015/11/06/how-important-same-day-delivery-shoppers)
headache and the reason is simple - every year, 15% of goods sold are returned or deemed excess, and many retailers do not have adequate systems in place to manage this flood of returned product. The 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. Tobin Moore explains that many of these items lose their value along the way, and remarkably, 30% of them don’t even make it into the hands of another consumer, with many ending up in landfill¹⁷.

Items that are not available for resale until they are back within the retailer’s warehouse also expose credit implications. The KPMG ‘Omni-channel Retail Survey 2016’ shows that in the case of nearly 15% of returned items it took more than 2 weeks for the consumer to receive their money back – this is a sub-optimal activity that directly impacts the customer experience and ultimately the retailer’s brand. Customers should not have to worry about how they return purchases (to retail stores or other locations etc.) and should be able to receive an immediate credit.

Understanding the cost to serve (cost of returns)

Across many industries, reverse logistics flows are typically unplanned, becoming very difficult to manage and are highly inefficient. Many retailers and manufacturers do not know the true cost of returns, as they lack skill and effective know-how to analyze the data and more often than not, they haven’t focused on this part of the supply chain network. “It can cost double the amount for a product to be returned into the supply chain as it does to deliver it,” says Iain Prince, Supply Chain Director, KPMG in the UK. He points to the online purchase of a coat, for instance: “To pick and deliver an order costs between £3 and £10 in the UK — it could cost double or treble that to be processed on the way back.”

Understanding the cost to manage returns involves an ability for an organization to define the end-to-end reverse logistics function and to accurately calculate the total cost (and associated overheads) to perform all related activities, including labor, facilities and processing costs associated with the recovery, disposal, discounted sale, recycling, and repair or refurbishment costs of the returned goods. For example, for companies requiring

¹⁷ Moore, Tobin, 2016, Reverse Logistics: The biggest retail problem technology has yet to solve, Multichannel Merchant (http://multichannelmerchant.com/opsandfulfillment/reverse-logistics-biggest-retail-problem-technology-yet-solve-27012016/)
'repair, refurbish or replacement' services, developing robust strategies that efficiently balance the trade-offs between cost, process and recovery value become increasingly important. Informed strategic choices around the cost - service - value trade-off strategies are imperative to setting up an efficient and effective returns management process.

So for many, it is only their operations team that truly understands the impact of reverse logistics as they deal directly with the growth of returned product volumes. There are many unplanned drivers of cost within a returns supply chain that add a great deal of complexity to this challenge, including:

- Customer service centers dedicated to returns/claims including diagnostics and associated Information Technology capability. The KPMG Omni-Channel survey reveals that it is key for retailers to personalize the user experience online. KPMG research found that 39% of retailers sent a personalized email communication to customers, compared to 9% last year. For those companies that have established good returns policies, this assists in building customer satisfaction and brand loyalty, leading to longer and more profitable relationships.

- Collection, managing claims (if defective), re-working/cleaning stock item before returning back into the network (i.e. through warehousing – receive, quality assurance, put-away, re-pick and pack and deliver). This is particularly challenging as packaging, identification and handling labels are usually removed by the customer upon opening the original product received, making the reverse logistics process difficult to manage.

- Transport charges, labor for assessment and re-processing, including packaging and handling for reverse distribution, items processed as received into the returns facility, along with accounting, visibility and reporting.

- Repairs, recalls and the adding of extra parts to process these returned products, are also unplanned cost drivers and affect the disposition and sortation processes. These costs include the disposition costs relating to stock returns, original equipment manufacturer returns, secondary market liquidation, repair and reshipping to the customer, spare parts, recycle and destruction.

Interaction with suppliers (especially when the product is defective, damaged or not to specification) is also quite challenging, as each supplier has its own process, policy and challenges for dealing with returned goods. The complexity is magnified significantly when products are sourced from an off-shore location as the returns flow lead times are even longer, adding more cost and working capital into the equation. In addition, there is often a strong reluctance from foreign suppliers to even acknowledge returned goods (as it is such a costly activity).
Reverse Logistics Approaches

The Traditional approach to returns involves aggregation, sorting, and consolidation and this process may take up to several weeks. However, a modern Strategic approach leverages technology and infrastructure to provide complete data visibility throughout the returns supply chain and may be completed in days. There is an obvious need to use big data and advanced analytics technology to drive predictive analysis that supports network planning/optimization and strategic decision-making to streamline the reverse logistics flow. With improved analysis of a supply chain’s network design for collection and drop points, the demand can therefore be closely understood and plans for refining and optimizing flows can be achieved.

Traditional versus Strategic approach

The graphic below illustrates both the Traditional approach and Strategic approach for a KPMG client (a global leader in medical technology, services, and solutions). The Traditional approach to returns involves aggregation, sorting and consolidation. The process adopted takes at least 11 steps and may take up to several weeks. As an alternative solution, the Strategic approach leverages technology and infrastructure to provide complete data visibility throughout the returns supply chain and may be completed in only 4 steps over a few days.
Criteria to consider when choosing a reverse logistics service provider

Companies generally engage a logistics service provider to assist with those return supply chain flows as they are not equipped to manage them in-house. Finding the right company to support you in meeting your reverse logistics needs is one of the most important things that you can do to minimise cost whilst managing service and risk.

Many logistics service providers still treat outbound and return flows as two discrete processes and therefore lack the ability to optimize the cost of collection and managing returns within their network. However, leading logistics service providers have effectively integrated the entire order process from cradle to grave and link the outbound and inbound process flows with enabling technology. A small example to illustrate this point is how the leading logistics service providers will enquire about returns at the time that they receive orders (via their call centers, online requests etc) and will start the return diagnosis at this point – this allows the logistics service providers to determine how to manage the return (re-use, repair, waste etc) and they simultaneously plan the logistics flow for both outbound and inbound, thereby optimizing the overall logistics network costs.
These leading logistics service providers have redefined the flow of the entire order (through to return) process. Using enabling technology and by inserting critical diagnostics into the process to information regarding returns, they use data to make informed planning decisions that help to optimize the execution of their fulfillment responsibilities. By using more advanced planning and execution capability to manage returns, these leading logistics service providers can help you to mitigate your exposure to the rising costs of returns. So, there is a lot to consider when deciding on the right services that a company needs in order to fulfill its reverse logistics obligations. In a recent article in The Smart Cube, Jitesh Gera discusses outsourcing the reverse logistics activities in order to benefit from the expertise, technology and infrastructure that Third Party Logistic Providers (3PLs) provide and how they can reduce returns complexities for their clients.

Reverse logistics is more complex than forward logistics, as the process begins at the point of sale, where a company representative is generally unavailable to effectively sort, classify, and/or evaluate returns. 3PLs provide expertise, infrastructure, and technology to clients that value these attributes. Many large companies, including Wal-Mart, Dell, Target, HP, Unilever, and Pfizer, have outsourced reverse logistics operations, even though they have superior capabilities to manage the forward supply chain.

Companies that deploy dedicated reverse logistics channel strategies and operating models aimed at minimizing the impact of working capital and operating costs within processing, storage and the distribution network have generated the greatest positive impact on profitability. Successful outsourced logistics operations are also characterized by their ability to respond to changing business service objectives, products and customer service promises. Finding a 3PL with an agile and efficient reverse logistics network and operating model is essential to consistently delivering a cost-effective and responsive customer service promise.

There are many considerations to be assessed when seeking the services of an external logistics service provider to support the returns flows, including:

- The type of products that the 3PL is experienced in handling/processing and their supply chain characteristics that both support the returns flow and create value for your organization.
- Which industries, channels and geographies the 3PL is renowned for supporting returns.
- Experience and specialist product handling capabilities, supporting technologies the 3PL utilizes to manage returns flows.
- Full extent of services beyond transport and warehousing (e.g. credit management, customer service facilities, repairs and repackaging, product restocking and disposal etc.).
- The technologies that they utilize to enhance their outbound and inbound planning and execution capabilities.
- Geographical coverage and extended network (through contract carriers).

Before engaging an external service provider, it is important to first develop a sound understanding of your current reverse logistics flow and service delivery performance and costs. Companies who set out on the outsourcing journey without a good understanding of their forward and reverse logistics channel costs, risk moving into inappropriate and costly service arrangements with a 3PL, and potentially becoming locked into a long-term arrangement for a service that does not deliver improvements in service or cost.

The service provider should be able to demonstrate how their network will contribute to more optimally managing the returns flows, as well as minimizing product processing cycles and customer response times. It is essential that the 3PL has the expertise, facility capacity and process controls necessary to manage reverse logistics activities. Returns typically arrive faster than they are processed or deployed. Accordingly, it is often difficult, if not impossible, to forecast with any certainty what product(s) will be returned, where they are returned and the extent to which the product(s) are authorised or warranted as valid returns.

Performance management

The dramatic increase in online e-commerce purchasing has placed considerable time and cost pressures on organizations’ responses to customer returns expectations. Hence, measuring and recording the cause and response times and costs associated with returns is more important today, and needs to be imbedded within key operational scorecards.
Typical business metrics used to measure reverse logistics address cost, service and supplier order fulfilment characteristics and may include:

- Financial key performance indicators (KPIs) including returns cost as a percentage of sales, returns processing costs by category/channel/supplier, shipping costs, inventory levels and carrying costs, write-offs;
- Responsiveness including return process cycle time (days);
- Customer feedback and experience; and
- Returns rationale including the percentage of returns due to damage, faults, preference changes and accuracy of delivery.

From experience, KPMG member firms are aware that a large percentage of products are returned under warranty. We also know that many of these returns are not validated by retailers, that products are not easily identifiable and usually accompanied by incomplete documentation. The measurement and recording of the reason for return at the individual product level, source of supply and understanding the nature or cause of each return is an essential data point to help develop service strategies and processes to manage the overall cost, service and risk exposures of returns flows.

Similarly, measuring and reporting the overall recovery value on customer returns and recalls for a financial year also needs to be identified. Typically, companies measure the percentage of returns (items and value) whilst considering options for the return of stock to the original equipment manufacturer, via liquidation in a secondary market, repairs and reshipping to the customer, use of spare parts, recycling and destruction dispositions etc.
Conclusion

As organizations seek new ways to gain competitive advantage, the often overlooked returns function can be a practical source of not only cost cutting but enhancing both profitability and brand reputation. Businesses that pay more attention to returns management will reap the benefits of delivering a more consistent, efficient and responsive customer experience and do so with the knowledge that they can operate in such a way as to cut costs and enhance service and profitability, whilst simultaneously mitigating reputation and operational risk.

Defining your reverse logistics strategy

As illustrated within this article, a well-designed reverse logistics strategy has the potential to unlock significant benefits for your business. Yet, many businesses fail to unlock this value as they do not recognize many of the key elements that are presented within this article. The following three steps can assist your organization to identify the critical elements within your network and help you to design a reverse logistics approach to realize optimal supply chain performance.

1. Reverse Logistics Diagnostic – The first step towards defining your reverse logistics strategy is to understand the current returns flows, including: identifying the total cost of returns (by product, by market, by channel – including the impact on any indirect taxes such as customs and duties, VATs etc as well as any regulatory constraints that may limit returns to/from certain countries), profiling the end-to-end returns and quantifying and categorizing your return flows. This information becomes instrumental to facilitate an accurate definition of your strategic approach to manage returns and will indicate where supply chain risks need to be mitigated. This activity needs to be supported by logistics optimization technologies using analytics that allow for fast-paced simulation and evaluation of return flows and the impact on the logistics network.

2. Define your business requirements that clearly illustrate what is needed within the returns logistics process – the types of activities that should be considered include:
   - Strong demand planning to manage the unpredictable nature of returns (e.g. the origin, volume and reason)
   - What will be returned, where is the return pick-up, what type of reason (defective, unsatisfied but ok, didn’t fit, customer changed mind etc.) – these all impact the frequency of collection and the pick-up/drop-off points and therefore ability to optimize the network flow/design and keep return costs low
- Diagnostic capability to easily identify the course of action post collection (e.g. repackage and reuse, repair, scrap/waste, extract parts for rework etc).

- Supplier engagement, as each supplier has their own processes, policies and challenges for dealing with returned goods (along the lines of the above) - this requires focus as the complexity is magnified significantly when products are sourced from off-shore as the returns supply chain and lead time is therefore much longer and adds significantly more cost and working capital into the equation. Often there is a strong reluctance from foreign suppliers to acknowledge returned goods.

- Customer service capability to identify and manage returns and any claims, including the diagnostics and associated Information and Communications Technology (ICT) capability that is required. Collection, managing claims (if defective), re-working/cleaning and processing the stock item back into system (i.e. through warehousing – receive, QA, put-away, re-pick and pack and deliver).

- Managing the transport, labor for assessment and re-processing, including:
  - Packaging and handling for reverse distribution
  - Item received into the Returns Facility
  - Accounting, visibility and reporting
  - Company repair, recall or parts processing
  - Disposition and sortation process

- Governance (controls, decision right, reporting etc) to effectively manage the disposition cost associated with the following outcomes:
  - Return to stock
  - Return to Original Equipment Manufacturer (OEM)
  - Liquidate in secondary market
  - Repair and reship to customer
  - Use spare parts
  - Recycle
  - Destroy

As previously discussed, the end-to-end reverse logistics process involves numerous stakeholders, all of which can have a material impact on the customer experience. It is important to understand and define the entire returns process, the supporting policies, and to also evaluate (KPIs) measuring the returns process, as this will ensure that the reverse logistics network design aligns with established return policies and customer expectations. Often through this step, it becomes clear that the returns policies are no longer suited to the business or customers and need to be revised.

3 Selecting an appropriate approach to managing returns – an in-house solution or relying on an appropriate external service provider. Armed with information gathered during the completion of the previous two steps, your organization can then begin to identify an appropriate approach to managing returns, including whether to manage these processes in-house or whether to seek the support of an experienced 3PL that has the necessary planning and technology capabilities and controls to satisfy all of your returns requirements. Keep in mind that the capabilities used to support your outbound logistics may not always be suited to supporting your returns requirements.

4 Where the engagement of an external logistics service provider is considered the preferred approach, your organization should only engage with those leading logistics service providers that can demonstrate how they will help to mitigate your logistics network costs and demonstrate other value added activities that they bring as part of their overall solution. The outcome of these activities may be surprising for most businesses as reverse logistics is often misunderstood and poorly managed. The value potential, however, is undisputed and only highlights why reverse logistics may become the greatest challenge for supply chains in the 21st century.
Big data analytics enhancing the performance of supply chains

Demand-driven supply chain 2.0

Future-proof procurement - now or never

Global Manufacturing Outlook 2016

Rethinking the upstream supply chain

Top of Mind Survey 2016