Reverse Supply Chain - The Need Of The Hour In E-Commerce Industries

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Abstract. In the era of next day delivery and 1-hour delivery, the Supply chain of any organization is evolving daily. This disruption in the Supply Chain process caused lot of organizational restructuring and strategic compliances. With evolving digital transactions, e-commerce purchase behaviour, quick delivery and other consumer choices of getting to a market place, there is also another dark side to these advancements. The volume of returns, products that reached end of its life, products that completed their purpose and cannot anymore help the customers stay stagnant in the market without going anywhere and without making any value to both consumer and producer. This non value adding instance can be seen as opportunity to make some value out of it. In this frame, comes the need of Reverse Supply Chain (RSC). The RSC can help the producers in getting back the produces from the market and converting it into some value adding products and resale again in the forward supply chain. The government regulations are also getting stringent in this regard and every organization is advised to move towards sustainability in everything they do. The issue with RSC is the uncertainty in everything and the absence of SOP in this field. This results in huge cost to the organization and there is no huge return to the organization except the name they receive for doing it which will add huge business value in the near future. This is the time to focus on developing the RSC in order to leverage the opportunities in the future. This work suggests the possibilities of constructing an efficient reverse supply chain and discusses the ways in which strategic competitiveness can be achieved.

Keywords: Reverse supply chain, reverse logistics, inventory, E-commerce, technology.

1 Introduction

Supply chain management, according to IBM, is the process of managing the entire production or value addition flow of a good or service —from converting raw materials to all the way to delivering the final product to the consumer. For years, Supply Chain process efficiency and effectiveness has been on research and multiple iterations and models have been developed and deployed in real time practices.

In this context the Reverse Supply Chain can be defined as follows, Reverse Supply chain management is the handling of the entire flow of information and product of the good or service — starting from the end consumer all the way to the manufacturer or producer for the purpose of recapturing value or proper disposal. Reverse Supply Chain is in place when there is a presence of returns of produces due to End of life cycle of the product, Obsolete produces and the produces which anymore does not add value to the customer. These produces can be retrieved by the organization with the help of Reverse Supply Chain and can be enriched and again added to the forward supply chain.

The returned products from the customers can be again moved into inventory which then follows the forward supply chain. These returns are just verified and if needed some enrichment is done to the products and moved into the supply chain. This reduces the return losses incurred by the organisation, since the returned goods move into the inventory as soon as it is returned.

This Reverse Supply Chain concept is slowly getting to headlines in the past decade which is mostly associated with sustainable practices of an organization (Benjamin & casey, 2011). In this way, the producers are able to formulate the strategic policies based on the efficient Reverse Supply chain practices. Also considering the governmental policies on Take Back actions and environmental regulations, the Government of India proposed the Extended ProducerResponsibility (EPR) for solid waste management and other wastes generated in India which focuses on sustainable practices by the producer itself (Kannan, 2013). The returns are not completely removable, but with efficient way of handling the returned products, the loss incurred due to returns can be reduced (Kumar, 2011).

2 Literature Review

Tan et al. (2017) in their paper defines the methods of extracting value from the products that are returned or reached the EOL (end of life) and the multiple ways in which the recycled/refurbished products can be introduced into the forward supply chain.

Peter Wells, M. S. (2006) in their paper, "Business models and closed-loop supply chains: a typology. Supply Chain Management: An International Journal" explains the importance of closed supply chains, which adds more value to the organization in terms of sustainability. The closed supply chain practices help the companies in strengthening as the competitive advantage in employing reverse supply chain practices.

Yanginlar (2020) in his research explains the exploratory research conducted in turkey companies on different verticals such as Automotive, White goods, Furniture brought out the value additions in employing Reverse Supply Chain practices in the organization. Theconstraints such as Internal and external factors are common to all industries.

Fleischmann (1997) in the article The Reverse Supply Chain published in Harvard Business Review states the importance of having a coordinated forward supply chain that leads to having a well-established reverse supply chain.

3. Reverse Supply Chain as Competitive Advantage

In business, a competitive advantage is the ability that allows an organization to perform more than its competitors (Davis, 2005). In days when there is a cut throat competition in everything an organization do, holding a competitive advantage is not an easy thing. With the help of Reverse Supply Chain, this competitive advantage can be explained for the company (Ahmad, 2019).Addition to this, with the focus on Climate change problems and other catastrophic events occurring then and there across the world, a company that can boast on its sustainable practices is always a Competitive advantage. Given the Paris Agreement 2015 and many other Agreements between nations and super powers, the unsustainable practise are questioned these days (Asheesh, 2017), (Shisira, 2013).

4. Reverse Supply Chain in E- Commerce

In India, E-commerce is a disruption compared to the traditional practices of visiting the store physically and deciding on purchases. The country's e-commerce revenue is expected to jump from US$ 39 billion in 2017 to US$ 120 billion in 2020, growing at an annual rate of 51%, the highest in the world market. This sector is mostly dominated by Flipkart India followed by Amazon India and small players like Paytm, Snapdeal and Myntra. This industry is valued at a very high price, but the profit making is very dipped from the day of starting the operations. In Figure2, the returns in Amazon India purchases has been included compared with the Revenue and the Loss figures. The World leader in E-commerce, WalMart acquired more than 50% stakes in Flipkart, showing their interest and footprint in Indian E-commerce market (Dutta et al. 2020).

With the introduction of subscription based Internet services by Tele operators, India stands at 665.31 million subscribers in June 2019.With the recent visit by Jeff Bezos sighting, Amazon is going to digital invest in Indian MSME's, the road ahead for all the players is going digital. This undoubtedly, increases the return rates by the customers and there have to be an efficient Reverse Supply Chain practices to handle the returns and gain value from it (Kushwaha, 2020).
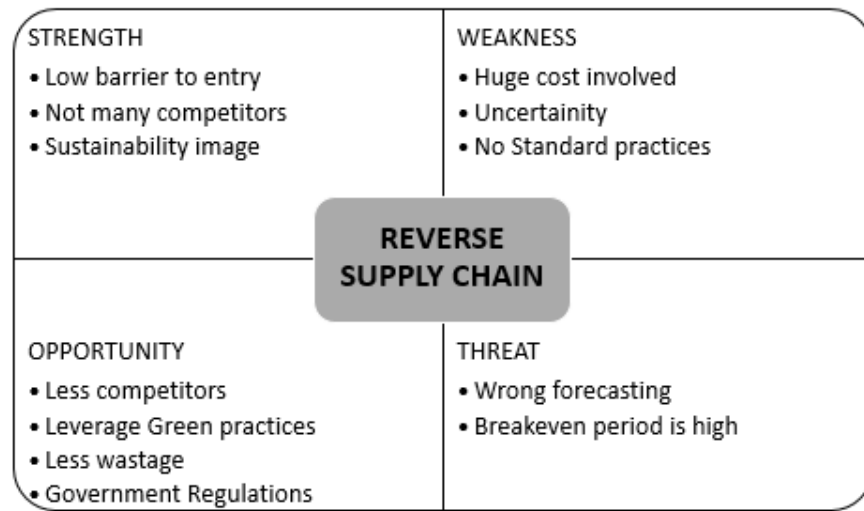
5. REAL TIME PRACTICES

Amazon Fulfilment Centre (FC), which takes care of distribution and return processing focus more on the real time data in regulating their forward supply chain. When inquired about the reverse supply chain the same focus given for forward is not given to the reverse process. This is obvious because the worker at the facility does not know the impact the returns are making at large level and also the quantity is way less in returns. Some of the questions are developed to gain deeper understanding on the practices.

5.1 What are the technologies installed to focus on Returned products?

Bar code scanner, computerised return information are used for the returned products (Navin, 2020).

5.2 What are the product category that are returns the most?

Apparels, Mobile phones, Mobile case, Gym equipment (Satya, 2019)

5.3. What are the reasons for the product returns?

Packing defects, Size mismatch, Colour mismatch, Quality not as per intended, Performance not up to expected, Older edition books, Misplaced orders(Lipan, 2017)

5.4.Is there any standard procedures for the returned products?

The returned products are received in a separate storage area and is scanned using barcodes. It is then sent to concerned departments and the departments will decide on the disposition method (Marisa, 2003).

5.5. What are the disposition strategies available for now?

Most of the returned products are again sent to the sellers or they receive them at the facility. Other products are checked and taken appropriate actions.

- Refurbishing the returned product by sending it to the seller
- Auctioning the returned products through third parties
- Selling to the recyclers through third party involvement (Mehdi, 2020)

5.6. How much the return products are given importance from the company perspective?

The returns are very less in earlier days. But in last few years, the returns are getting higher because of the changes in return policies by the seller. It is getting importance now and company is focusing on reducing the returns (Muhammad, 2012).

6. WALMART – PIONEER IN REVERSE SUPPLY CHAIN

Walmart is an American retail company that has its own online marketplace, local hypermarkets, and departmental stores. Walmart has around 11,438 stores and clubs in more than 25 countries and operating under 55 different names. In 2019 Forbes listed Walmart as the world's largest revenue generating company, estimated about US $514.50 billion (Raffaele, 2019). As of March 2019, Walmart is operating in more than 11,695 retail units in an increasing number of countries and has e-commerce websites in several other countries. To explain their retail presence, it can be said that 90% of American population live within 15 miles of a Walmart store. Using its RFID tech at the counter and Electronic product information, it is able to know when, where and how much is needed at a given time and able to maintain an efficient supply chain. Point of sales data of all stores were shared with suppliers in a real time manner and suppliers are always asked to maintain their inventory. This vendor based inventory helps Walmart to receive products at the right time and also the long term relationship with suppliers help them develop their business.

Walmart asks the seller's themselves to define their own return policy, which reduces the cost and also makes it easier for the Suppliers to manage the returns. Oneof the important strategy by Walmart in return process is their option to return the products at the physical store even if the product is purchased in online marketplace. This makes the process easier for the customers and they can also purchase some other product for the same price.

To curb the revenue that is lost because of returns, Indian E-commerce giants can focus on efficient Reverse Supply Chain practices that could be applied in a large scale manner. It is the need of the hour since, the number of online purchasers in India is increasing

exponentially and this also results in high returns. So developing an efficient reverse supply chain can prepare the company when there is some disruption happening in the E-commerce market.

7. CONCLUSION:

In this era of Indian E-commerce, the returns are going to exponentially rise and thus return management should be focused and this reduces the revenue loss in the organization. Like Wal-Mart and many other organizations, the supply chain practices can be copied and implemented in Indian industries. Reverse supply chain is an important section of any e-commerce business. The growth of e-commerce websites and online business has made the implementation of reverse logistics a very necessary thing. There is an alarming need for an efficient strategy regarding reverse supply chain in India. This type of supply chain offers sustainable growth and economic advantages.If there is an online business, then it is must for the companies to allow the consumers to return the products. You have to think of an efficient tracking and monitoring system to track the return shipment to make sure of the better service.

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