Return Behavior of Indian Consumers for Apparels and Electronics Purchased Online - Customer Behaviour & Scope of Improvement

Gautamkumar Rajkumar, Ankit Pandey

Abstract: The logistics industry has changed significantly due to the adoption of newer technologies, resulting in a more complex and multi-locational system. Online shopping companies, like Amazon and Flipkart, now make it easy for individuals in rural areas to purchase goods without having to leave their homes. Additionally, reverse logistics involves taking materials from the consumer destination and redistributing or disposing of them properly. This shift in expectations has been driven by consumer-centric policies, encouraging people to make more purchases, but at a higher environmental cost. This paper looks at the Indian e-commerce industry in terms of how customers differ from the industry in terms of quality of service, and how big data and blockchain technology can help to provide modern solutions. We used customer surveys to gain insight into the perspectives of consumers, which we then analysed and visualised using Tableau. This paper will examine the Indian e-commerce industry in terms of how customers vary from the industry in terms of quality of service, and identify strategies to bridge the gap between tier-1 cities and tier-2 or tier-3 cities. Additionally, it will explore ways to achieve cost reductions for companies and reduce environmental impact through the use of big data and blockchain technology to find modern-day solutions.

Keywords: Logistics, Supply Chain, E-Commerce, Reverse Logistics, Customer Return Behaviour, Data Analytics.

I. INTRODUCTION

The Internet has rapidly been adopted by the Indian population following the Jio revolution, resulting in a shift in how customers purchase items (Statista, 2022). Data from Statista reveals that there were over 150 million online shoppers in 2020, and this number is expected to increase due to the low cost and accessibility of the internet, as well as the increased use of smartphones. Customers are provided with the ease of purchasing various products in terms of size, colour, and quantity, as well as several payment options, including cash on delivery (Harvard Business Review, 2014). Delivery times can vary from one day to a week. To expand their reach, many companies have started offering their products online. This grants them access to a larger market than selling through physical stores in a limited area. Additionally, it enables them to target specific customers they may not reach in physical stores. The trend of online shopping in India began approximately ten years ago when Flipkart started selling books. Since then, the range of products available has expanded (Thomason Rajan, 2020).

II. REVIEW OF LITERATURE

"Customer Satisfaction towards Online Shopping from Flipkart: With Special Reference to Raipur City” (Srirsh Dixena, 2018) and (Suman Sahu, 2018) state that customer satisfaction is crucial in various aspects, including on-time delivery, data privacy, excellent customer service, and the delivery of high-quality products in Tier-2 city of India - Raipur [1] [10]. They highlight how e-commerce platforms often fall short in terms of after-sales service, leading to difficulties in retaining customers.

"Reverse Logistics of the Indian E-Commerce Industry - Consumer Perspective and Ways to Improve” by (Avinash Kumar Pathak, 2020), (Neeraj Joshi, 2020), and (Rajesh Kumar, 2020) address the primary challenge in reverse logistics: the pickup turnaround time. They propose countering this issue through the application of blockchain technology and big data [2] [14]. The paper also delves into the observation that companies often prioritise speedy product delivery, such as one-day or two-day delivery, over enhancing the product return process. Furthermore, it highlights the disparity in the efficiency of return logistics between tier 2 and tier 3 cities compared to tier 1 cities.

"A Conceptual Paper on Reverse Logistcs” (Prashant K. Giri, 2018), (Kavach Khanna, 2018), and (Mehul Rai, 2018) emphasise the numerous advantages of reverse logistics for both organisations and the environment [3] [11] [12]. It enhances the value and profitability of items, and it is not solely the responsibility of sellers but also e-commerce companies. Proper optimization of reverse logistics can substantially benefit organisations.

"The Future of E-Commerce in India” by (Nisha Chanana, 2012) and (Sangeeta Goele, 2012) highlights the thriving growth of e-commerce in India. These opportunities are not limited to companies but also extend to retailers, wholesalers, producers, and customers. The paper discusses the significant growth of companies over the past decade due to policies tailored to the Indian demographic, such as Cash on Delivery and Easy Return policies.
The past years have seen a rise in the number of companies enabling e-commerce technologies and the internet in India [4].

Why are Products returned?
Returns primarily occur for two reasons: unplanned returns or planned returns. Unplanned returns encompass situations like product damage or incorrect product deliveries. On the other hand, planned returns involve intentional returns, often involving consumer behaviour that may be considered unethical. To ensure and sustain profitability, companies must establish policies to address both types of returns.

Why do we want to reduce the portion of reverse logistics?
The Indian retail market is estimated to be valued at approximately $900 billion (The Economic Times, 2021), with approximately 3.4% of purchases being conducted through e-commerce platforms such as Amazon and Flipkart, accounting for around $30 billion in total. This figure is projected to increase four to fivefold, reaching approximately $100-120 billion by 2025 (ETRetail.Com, 2020) [5]. Concurrently, sellers on these e-commerce platforms are grappling with financial losses attributed to high return rates, which are estimated to be around 30%. A 2017 study by Redseer suggests that this rate could surge to as much as 40%, especially during significant sales events like Flipkart’s Big Billion Days and Amazon’s Great Indian Festival. Overall India’s e-commerce sector is likely to jump 3X to $150-$170 billion by 2027 from $50 billion in 2022. (The Financial Express, 2022) [6] [13].

Table 1: Online Retail Performance

<table>
<thead>
<tr>
<th>Category</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td>Gross GMV</td>
<td>$13-14 bn</td>
<td>$14-15 bn</td>
<td>$18-19 bn</td>
</tr>
<tr>
<td>Shipped GMV</td>
<td>$11-12 bn</td>
<td>$13-14 bn</td>
<td>$16-17 bn</td>
</tr>
<tr>
<td>Fulfilled GMV</td>
<td>$9-10 bn</td>
<td>$10-11 bn</td>
<td>$12-13 bn</td>
</tr>
</tbody>
</table>

Source: Redseer

Table 2: Category-wise returns:

<table>
<thead>
<tr>
<th>Category</th>
<th>Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparels</td>
<td>37-42%</td>
</tr>
<tr>
<td>FMCG</td>
<td>28-33%</td>
</tr>
<tr>
<td>Mobiles</td>
<td>22-27%</td>
</tr>
<tr>
<td>Large Appliances</td>
<td>29-34%</td>
</tr>
</tbody>
</table>

Source: Redseer

Why is Reverse Logistics an indispensable part of e-Commerce?
In this article, we will explain the pain areas in e-commerce reverse logistics that retailers face and how we can make reverse logistics effective.

(A) Customer Retention
Efficient e-commerce reverse logistics is essential for businesses to be able to retain customers. Loyal consumers provide much more value to companies as compared to one-time customers, so it’s vital to keep them coming back—having a hassle-free return process is one way to do this in the e-commerce business. These days customers will be more likely to choose a company that offers them the safety net of being able to return the product without any hassle. That is why most e-commerce companies keep the return period longer than a normal shopkeeper. In addition, when a customer comes to an e-commerce platform for the first time to buy something, they preferably look for an easy returns process because that will give him a cushion of safety.
While many are accustomed to making purchases online, individual customers tend to be more hesitant while purchasing from an online website because they haven’t done a transaction before. Advertising a simple return process can encourage first-time buyers to give a company advantage over its competitors. Reverse logistics has a very huge cost but it’s like an operating cost for the e-commerce companies so they cannot remove it completely unlike mom-n-pop stores because there are various reasons that make reverse logistics inevitable including delivery of wrong products, customer behaviour, damaged products, delayed delivery of the product and many more. In e-commerce, logistics is typically seen as a one-way process, with the ultimate goal of delivering products to customers. However, the increase in e-commerce and growing consumer awareness has created a new challenge for retailers, the need to move products in the opposite direction. This is because returns play an important role in encouraging repeat customers. The traditional linear supply chain model is no longer sufficient, as there is now a second cycle of logistics that begins after a product is delivered to a customer (iThink logistics, 2018) [7].

(B) Current Market Situation (Problem Statement):

Returns are a common occurrence in the online retail industry. According to (Shopify, 2021) the rate of product returns in physical stores is 5%, while it is 20% for online stores. This is due to the fact that when people shop online, they can only view pictures of products and cannot physically touch or examine them, but they can read information from product descriptions. Thus, return issues are prevalent, making returns an integral aspect of e-commerce business. They are to be expected. There are various reasons that make reverse logistics inevitable including delivery of the wrong product, change in customer behaviour, damaged product, delay in order fulfilment, and many more.

(C) Product returns by the customer: Some goods are inevitably returned to the seller. It is true in the case of physical as well as e-commerce stores (Shannon Callarman, 2020). Customers return the products because:

- Incorrect product or product size ordered
- Customer no longer needs the product
- The product does not match the customer’s expectations
- Retailer ships the wrong product or product size
- The product was damaged upon arrival
- When the customer engages in wardrobing
- Customer cancelled the order
- Mal-functioning product

Product returns could be the fault of both sellers and customers. Sometimes the return of a product happens due to the activities of both seller and customers (iThink Logistics, 2018) [7]. In the initial stage a lot of return orders got placed due to mismanagement issues and that created a big problem for the companies so somehow they have resolved that issue to an extent but still, there is a lot of scope for improvement. Retailers could differentiate the customer personas who return the product for false reasons and they could ban their account from their websites like mesh did that last year to various customers and the reason is that they are harmful to the company’s growth.

(i) What makes the retailers frustrated?

Nowadays customers have started wardrobing which when a customer purchases a suit, wears it for an interview or at any function, and then returns it (davinciretail). The customer has bought a product with no intention of keeping it, tried it for satisfaction, and returned it later. Sometimes customers ordered a lot of products in different colours and sizes then they kept one that fits the best and returned the rest. When customers do all these activities they fault the rationales behind the product returns.

(ii) What makes the customers frustrated?

- Wrong product received
- Inaccurate description
- Damaged product

III. RESEARCH METHODOLOGY

We have conducted a survey amongst students about their return behaviour and satisfaction towards products bought through online shopping. The survey was analysed statistically to achieve the objective.

(i) Data Collection

We have conducted a questionnaire based survey amongst students from Tier 2 & 3 cities of India and our perception of the research was to analyse the students buying behaviour as well as their level of satisfaction. Sources of the primary and secondary data are discussed. The study is conducted in Vadodara and other Tier 2 and 3 cities by taking 122 respondents using a convenient random sampling method.

(ii) Survey Questionnaire

To assess the satisfaction of the students towards using online shopping. We include questions in the survey related to how often they shop online and return the product. What usually are the reasons for returns of Apparels & Electronics items. Few situational based questions were included related to whether they will agree to take product delivery with discount if any minor defect is found during Open Box Delivery.

The questionnaire was designed to achieve the following objectives:

- Understanding how often do they shop online
- Understanding their return behaviour
- Understanding the major reason for returns
- Understanding their behaviour through situational cases

(iii) Sample size

The sample size of 122 responses were taken. It consists of a student group including both Male & Female from Tier 2 and 3 Cities of India.

(iv) Statistical Tools

We used the following tool for this study:

\[
\text{Percentage of Respondents} = \frac{\text{Number of Respondents}}{\text{Total Respondents}} \times 100
\]
Table 3: Target Group of the Study: This table presents the findings of a survey conducted across diverse age groups, encompassing individuals ranging from school students to working professionals, each falling within distinct income brackets

IV. DISCUSSION

A. Survey Analysis and Interpretation

Chapter 3: Topics

Figure 1

Fig 1: Monthly Pocket Money or Self Earning: 59% of the respondents are earning 1000-3000 per month as shown in the Figure 1

# Correlation between Age group of people and their monthly earnings

Figure 2

Correlation between Monthly Income & Age

Chapter 4: Topics

Figure 3

Fig 3: Monthly Income & Age: The correlation between monthly income and age groups is shown in the Figure 3.
Fig 2: Correlation between Age group of people and their monthly earnings: Our survey results showed (Figure 2) that 79% of those who participated range between the ages of 18 to 21 and belong to an income range between 1,000 - 3,000. This low income can be attributed to their age. Respondents from the income range 3,001 - 10,000 are mostly within the ages of 18 to 21 and 38% of them are between the ages of 22 to 25. Similarly, people belonging to the income range of 10,001 - 25,000 are mostly between the ages of 22 to 25 as this is when they would typically begin working, yielding a stable income. People ranging from 25,001 - 50,000 mainly consist of those between ages 22 to 25 due to the varied professions at this stage. Finally, those whose incomes exceed 50,000 are mostly above the age of 26 and hold higher income.

How often customers purchase apparels through e-com platform

![Figure 3](image)

Fig 3: How often do customers shop for apparels items through E-commerce platforms?: Our survey results (Figure 3) show that people tend to do a lot of shopping for apparel. This is because they buy new clothes for every festival. On average, 38% of people in the 1000-3000 income group shop 1-2 times in a year, with an average of 3-4 times in a year. Similarly, 43% of people in the 30001-10000 income group shop 5-10 times in a year, which comes to an average of 5 times in a year, and almost 50% of people in the 25001-50000 income group purchase clothes 5-7 times in a year. (Figure 3) There is also interesting data from people earning more than 50000: 33% of them shop more than 10 times, with the same number going for 3-5 times and 5-10 times categories.

How often customer purchase electronics items through e-com platform

![Figure 4](image)

Fig 4: How often customers shop for electronics items through E-commerce platforms: It is logical that people with higher incomes would buy items more often since they are able to afford more. (Figure 4) Survey shows that 57% of people in the income group between 1000-3000 shop 1-2 times per year, while 50% of those in the income group between 3001-10000 shop 1-2 times. However, the frequency of online shopping varies greatly among higher-income groups. People earning over 25k tend to shop online 3-5 times a year, because they can afford to buy new things more frequently than lower-income groups.
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It appears that people with higher incomes are more likely to purchase electronics items more often than those with lower incomes due to their increased spending power. One strategy that could be used to encourage more frequent shopping among lower-income groups is offering incentives such as discounts, coupons, or rewards. These incentives can help to make purchasing electronics more affordable and accessible to those on a tight budget. Additionally, providing access to helpful tools and resources, such as comparison websites or buying guides, can help shoppers make informed decisions and find the best deals on electronics. Lastly, purchasing electronics is primarily about trust which e-commerce companies can offer to help customers prefer buying online.

[Situational Case: Electronics]
While taking an “OPEN Box Delivery” of the refrigerator via an e-commerce platform, you notice a small dent on your product. It would not affect the functioning of the refrigerator and is not visible on the outside.

Figure 5
Fig 5: Situational Case of Electronics: We presented a case to customers where they had ordered a refrigerator from an e-commerce platform and upon delivery, found a small dent on the outer surface of the refrigerator that did not affect the functionality of the refrigerator. We offered them the option of keeping the refrigerator in exchange for an incentive. Our survey found that 53% of people in the income range of 1000-3000 would keep the product (Figure 5), but as income level increases, people were less willing to accept a product with a dent and instead preferred a replacement. This is likely because people with higher income tend to not compromise with small discounts. This case was more successful with people of low income, as it helps companies save on logistics costs and time.

[Situational Case: Apparels]
You purchased a brand-new Louis Phillippe T-shirt on a 50% discount. On delivery you found it having a few dirty spots which would be removed through dry cleaning.

Figure 6
Fig 6: Situational Case study of Apparels: We presented a similar case for apparel purchases, which customers tend to make 3-5 times per year on average. (Figure 6) The scenario presented was a customer who ordered a t-shirt for INR 1000 from an e-commerce platform and found a minor colour stain on it that could easily be removed by dry cleaning at a cost lower than the reverse logistics cost of the company. We offered a 10% cashback incentive to customers for keeping the product, which would help companies save on return costs and time. Our survey found that 44%, 48%, 36%, 38%, and 67% of people from the income groups 1000-3000, 3001-10000, 10001-25000, 25001-50000, and above 50k respectively would accept the product with a 10% discount. There were very few people who asked for replacement or cancellation of the order.

**How Many Customers Accept That They are Serial Returners?**

![Count of Would you describe yourself as a "serial returner"?](image)

Figure 7

Fig 7: How many customers describe themselves as a serial returner: A serial returner is someone who purchases a product, uses it, and then returns it. Only 12.3% (Figure 7) of respondents admitted to being serial returners, despite the likelihood that more individuals engage in this behaviour. The cause of serial returning can include frequently shopping and returning items shortly after use, or purchasing items such as clothing for special events like marriage or parties and returning them afterward.

**How long do customers keep the product before returning?**

![Count of How long do you keep items before returning?](image)

Figure 8

Fig 8: How long customers keep the product with themselves before returning: 45.1% of respondents (Figure 8) reported returning items within a week or before the return period ends, which can be considered a significant threat. These individuals may fall into the category of serial returners. To address this issue, companies can implement policies that encourage customers to inspect their products within a few days of delivery in order to reduce the percentage of serial returners.
Why does the customer return the product?

**Figure 9**
Fig 9: What are the major reasons customers return an item: The most common reason for returned products is damage or defects, followed by discrepancies in colour compared to the online representation, and then size issues for apparel items. (Figure 9)

Customer suggestions towards the return process of the product.

**Figure 10**
Fig 10: What changes customers want in the return policy of e-commerce platforms: Genuine customers primarily seek easy return options (Figure 10). Other reasons include a faster return and refund process. Companies frequently simplify the process.

**Figure 11**
Fig 11: Which minor defects would customers accept in a product if an instant cashback is provided for not returning the product: 51.6% of respondents (Figure 11) have agreed to accept the product if some instant cashback is given for accepting a minor defect in the electronic product or minor colour fade in apparel. If a customer accepts delivery items with slight imperfections in electronic products or slight colour fading in apparel can save companies significant costs associated with the reverse logistics process of returning the product. Additionally, it can save the user time and effort to re-purchase the item. This approach not only reduces the expenses and resources required to store and resell products with minor defects as refurbished items. This can be beneficial for both the company and the consumer, as it can make the product more affordable for the consumer, while also allowing the company to recoup some of their costs. And creates a win-win situation for all parties involved. This proposal can be integrated with an open-box delivery system and involvement of tech.

Suggestions
1. Serial Returner: Companies should implement a policy for handling serial returners based on verifying the genuine condition of products at their end after getting the product returned, rather than simply tagging customers with a high number of returns as serial returner.

2. Policy for instant cashback on minor defects: Offering a cashback of few % for minor defects in products can save costs associated with reverse logistics, and can be beneficial for both the company and consumer. This approach creates a win-win situation for all parties involved.

3. Use of AI & AR to recommend cloth size: Companies should utilise Artificial intelligence and Augmented reality to recommend the correct size to customers to reduce returns due to incorrect sizes and lack of standardisation.

4. Prompt Inspection and Return Policy to Ensure Genuine Intent: Customers should be encouraged to thoroughly inspect delivered products within 1-2 days to demonstrate genuine intent and avoid potential misuse of return policy. Companies can use data analytics to identify serial returners, and impose a return fee to deter bad practices. Additionally, implementing a same or one day return policy can prevent customers from holding onto products for extended periods and curbing such practices.

5. Transparent policy around return window and about open-box delivery: E-commerce companies should clearly communicate their policies for open-box deliveries, about return windows to customers, and the time frame for returns through a detailed message once product is out for delivery and website update on website before checkout. This will ensure clear communication.

V. RESULT

The research study yields several important recommendations. Firstly, it emphasises the need for a more discerning approach in handling serial returners, focusing on verifying returned product conditions rather than broadly categorising customers. Secondly, it suggests implementing a cashback policy for minor product defects, offering mutual benefits for consumers and companies while reducing reverse logistics costs. Thirdly, the research advocates the integration of advanced technologies like AI and AR for personalised sizing recommendations, addressing sizing discrepancies and standardisation issues that often lead to product returns. In addition, the study recommends promoting genuine customer intent through a prompt inspection and return policy and emphasises transparent communication about policies, including those concerning open-box deliveries and the return process. These recommendations collectively aim to enhance the online shopping experience in India for both consumers and e-commerce companies.

VI. CONCLUSION

In the context of online apparel and electronics purchases in India, this research paper delves into the intricate issue of return behaviour exhibited by consumers. It proposes a comprehensive strategy to enhance the online shopping experience and operational efficiency for e-commerce companies. In conclusion, this research paper offers a comprehensive strategy for addressing the complex issue of return behaviour among Indian consumers in the online apparel and electronics market, with the aim of improving the overall customer experience while minimising operational challenges associated with high return rates.

DECLARATION STATEMENT

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REFERENCES


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