

This report analyzes 300+ e-commerce orders using Microsoft Excel to understand a return rate increase from 12% to 19%. The analysis identifies size issues (37.22% of returns), high-risk categories (Outerwear at 76.47%), and COD risk (25.40% RTO), and proposes targeted actions to reduce returns below 15% within two quarters without impacting sales.

UrbanThreads

Returns

Analysis

Purple Merit — Data Analyst Intern
Assessment

Nikhil Kumar

PROBLEM-SOLVING / BUSINESS CASE

Business Context

The return rate has increased from **12% to 19%**, resulting in an estimated **₹18–22 lakhs/month** in reverse logistics, restocking, and refund costs. The objective is to **reduce returns below 15% within two quarters** without materially impacting sales.

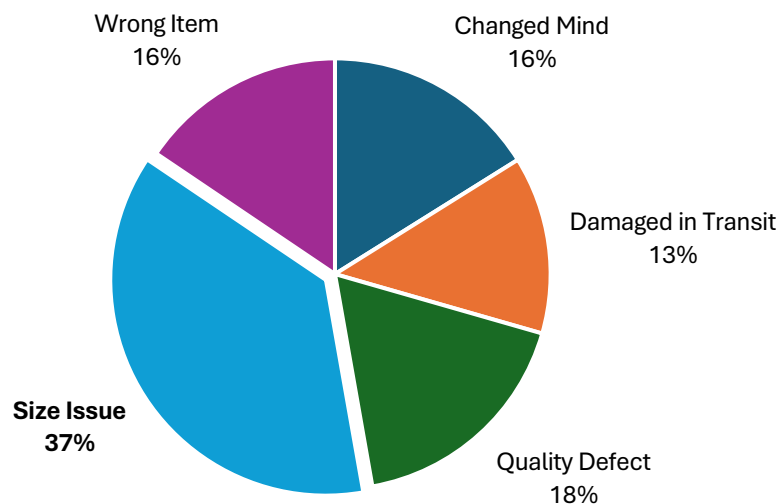
Part A: Root Cause Hypothesis (Data-Backed)

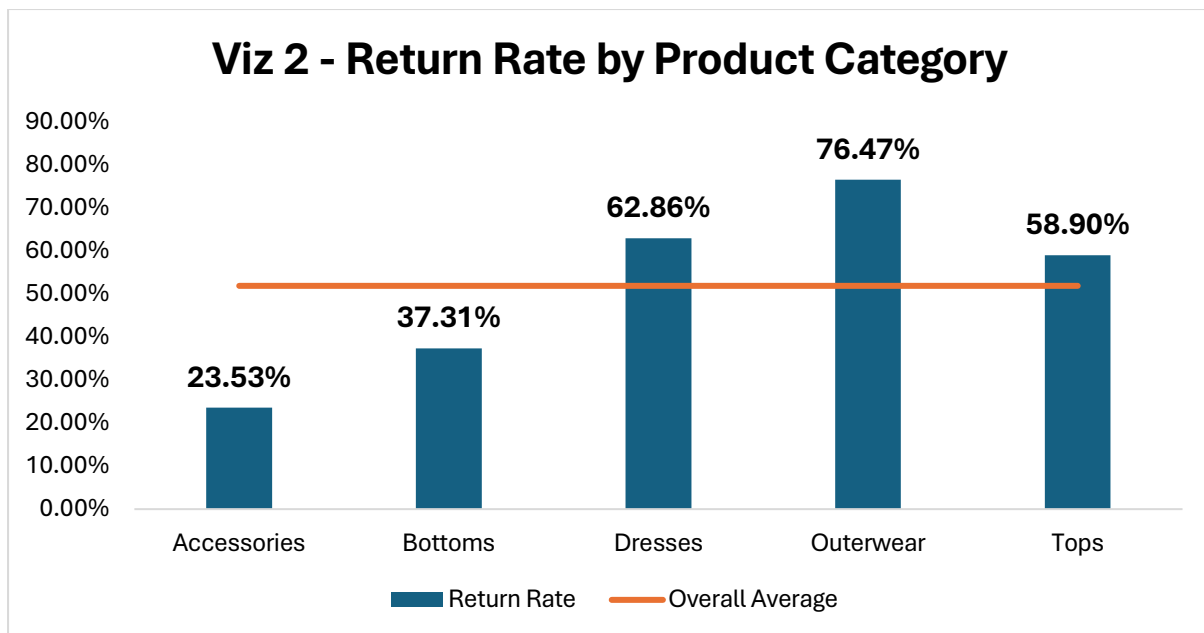
Based on the analysis, the increase in returns is primarily driven by the following factors:

1. Size and Fit Issues

- *Size Issue alone contributes **37.22%** of all returns (Viz 3).*
- Categories with the highest return rates—**Outerwear (76.47%) and Dresses (62.86%)**—are size- and fit-sensitive (Viz 2).
- This indicates expectation mismatch rather than fulfillment failure.

Viz 3 - Return Reasons Breakdown





2. High-Risk Customer-Channel Combinations

- **New customers via Instagram Shop show the highest return rate at 35.00%**, significantly higher than any returning-customer segment (Viz 4).
- This suggests acquisition-driven risk from promotional and social-commerce traffic.

3. Cash-on-Delivery (COD) Risk

- COD orders show a **60.32% return** rate and **25.40% RTO** rate, far higher than prepaid methods (Viz 5).
- COD materially increases financial loss through failed deliveries and reverse logistics.

Part B: Recommended Actions

1. Improve Size & Fit Guidance on High-Return Categories

- **What to change:**
 - Add detailed size charts, garment measurements, and model-fit references on PDPs.
- **Target segment/category:**
 - Outerwear and Dresses; first-time buyers.
- **Expected impact:**
 - Reducing size-related returns by even **30%** would lower overall return rate by **~4–5 percentage points**, bringing returns closer to the **15% target**.

- **Risks / trade-offs:**

- Minor UX and content effort; no negative sales impact expected.

2. Restrict COD for High-Risk Segments (Selective, Not Blanket)

- **What to change:**

- Disable COD for **New + Instagram** orders or require prepaid for first-time buyers above a value threshold.

- **Target segment/category:**

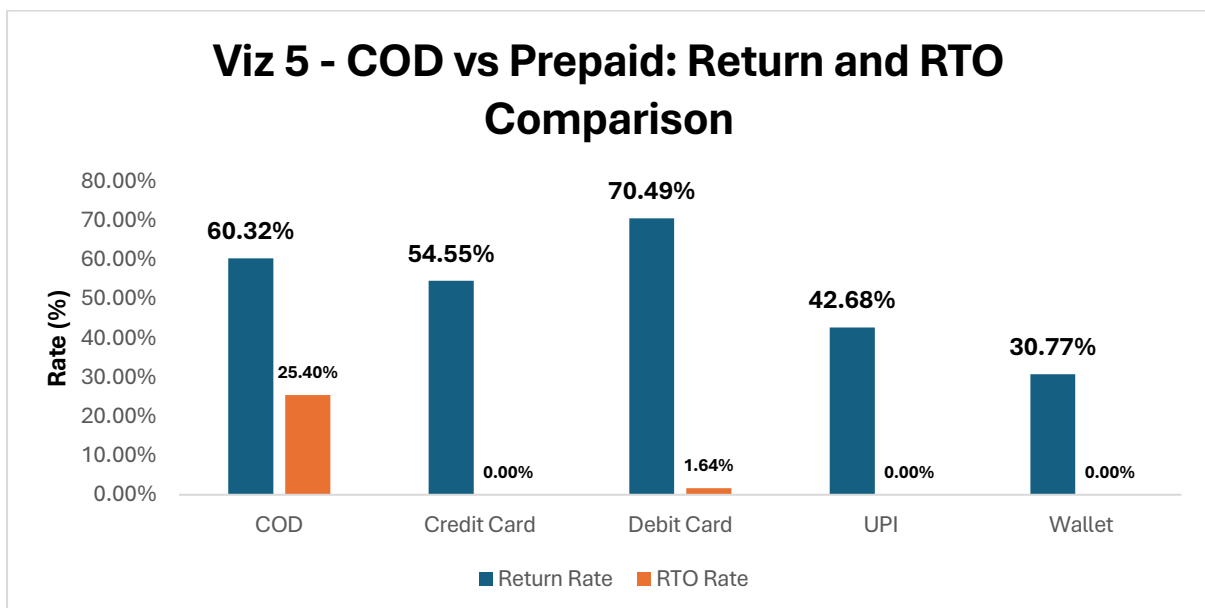
- New customers, Instagram Shop traffic.

- **Expected impact:**

- Reducing COD exposure could cut **RTO losses by ~20–25%** and reduce overall returns by **~2–3 percentage points**.

- **Risks / trade-offs:**

- Potential short-term conversion drop; mitigated by offering UPI incentives.



3. Shift Promotions from Broad Discounts to Targeted Offers

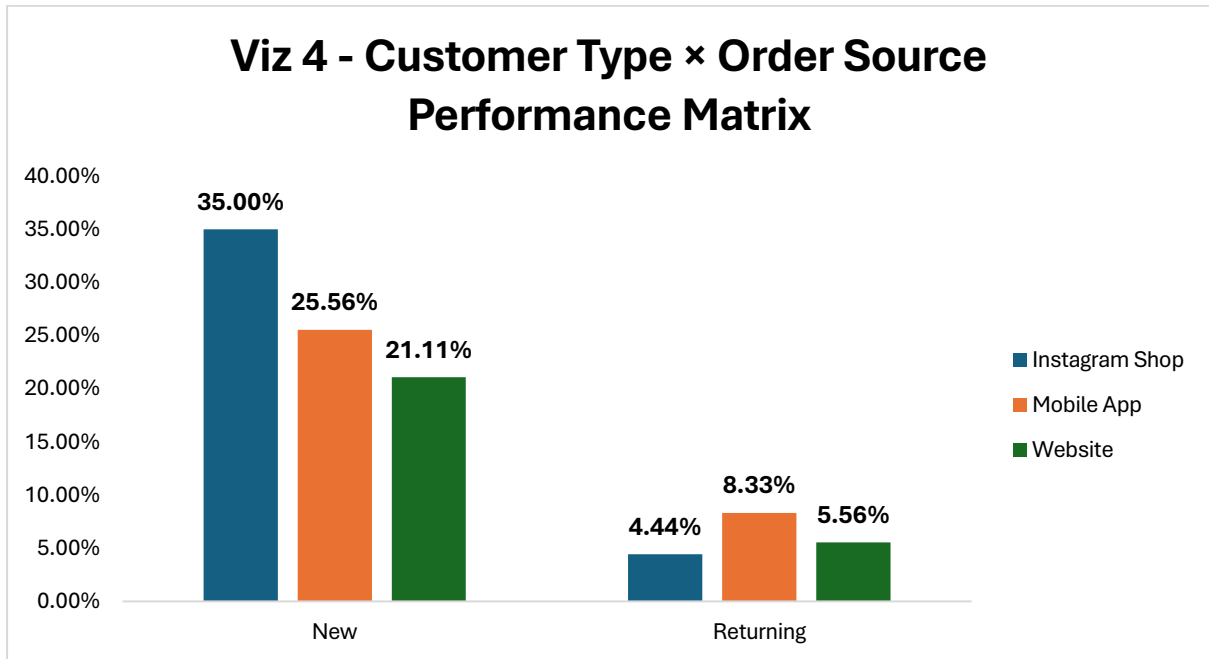
- **What to change:**

- Reduce blanket promotions; focus discounts on returning customers and low-return categories.

- **Target segment/category:**

- Promotional traffic and new-customer cohorts.

- **Expected impact:**
 - Lower low-intent purchases; expected **1–2 percentage point** reduction in return rate without impacting GMV materially.
- **Risks / trade-offs:**
 - Slight reduction in top-line during promotions; improved net margin.



Part C: What I'd Want to Test

A/B Test Proposal:

- **Test:** Enhanced size guidance + fit messaging vs. current PDP for Outerwear and Dresses.
- **Why:** Size issues drive **37%+ of returns**, making this the highest-impact lever.
- **Success metric:** Reduction in return rate for test group vs control within 30–45 days.

Part D: Assumptions & Limitations

- Assumes return behavior patterns remain stable over the next two quarters.
- Does not account for supplier-level quality variance or customer-level lifetime value.
- Limited visibility into customer feedback text and post-return surveys.

(Note : Each visualization is placed immediately after the insight it supports, ensuring a clear cause-effect narrative without overwhelming the reader.)

Open-Ended Questions :

1. A colleague suggests we should just disable returns for all orders under ₹999 to reduce costs. What's your reaction to this idea?

Ans. - I would not recommend a blanket ban, as it risks customer trust and could reduce conversion, especially for new customers. Since returns are driven more by **size issues (37.22%) and specific segments** rather than order value alone, a targeted approach (e.g., restricting COD or improving size guidance) would reduce costs without hurting sales.

2. The marketing team wants to run another 40% off sale next month. Based on your analysis, what conditions or guardrails would you recommend?

Ans. - A 40% sale should be allowed only with **guardrails**: restrict COD for new customers, exclude high-return categories like **Outerwear and Dresses**, and cap discounts for Instagram-led traffic. This ensures sales growth while limiting low-intent purchases that historically drive higher returns.

3. If we offered free alterations for size-related returns instead of full refunds, how would you estimate whether this is cost-effective?

Ans. - I would compare the **cost of alteration** versus the **average refund + reverse logistics cost per size return**. If alteration cost is significantly lower and converts even **25–30% of size-related refunds into retained orders**, it would be a cost-effective intervention with positive margin impact.