

# Cartify's

## Sales and Operational Insights Report

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A focused analysis of orders by region, segment, and category indicates revenue concentration in Electronics and Fashion, margin sensitivity to discounts and shipping, and operational leakage from late deliveries and avoidable returns, with targeted actions to recover contribution and stabilize logistics.

### Key insights

- Revenue concentration with margin risk: High-ticket Electronics (Laptop/Mobile/Audio) dominate NetSales but often carry 15–30% discounts and non-trivial ShippingCost, compressing operational profit in several orders and categories.
- Discounting not always accretive: Many laptop/mobile transactions apply double-digit discounts without parallel gains in DeliveryDays or lower return incidence, implying promos lift units but erode margin with no ops offset.
- Returns clustered in Fashion/Lifestyle: Frequent ReturnReasons include Late Delivery, Damaged, Size Issue, and Quality Issue across Apparel/Footwear/Accessories, signaling QC and fit/size guidance gaps that drive negative contribution after COGS and shipping.
- Delivery delays by fulfilment lanes: “Late Delivery” appears across FC1–FC4; coupling DeliveryDays – ExpectedDeliveryDays with return flags will isolate lanes and periods where capacity constraints during promos caused service failures.
- Segment and regional patterns: Consumer and Small Business orders in West/East regions show many high-value transactions; prioritizing SLA and promo controls here will yield outsized profit recovery.
- Hidden top-line give-ups: Computing Revenue Lost Due to Discounts as  $\text{sum}(\text{Quantity} \times \text{UnitPrice}) - \text{NetSales}$  reveals sizeable list-to-net gaps on Electronics and selective Fashion, warranting discount caps and bundle-first tactics.

### Operational recommendations

- Logistics stabilization: Build a Region × FulfilmentCenter delay heatmap using  $\text{Delivery Delay Days} = \text{AVERAGE}(\text{Order}, \text{DeliveryDays} - \text{ExpectedDeliveryDays})$ ; re-slot capacity on peak promo weeks and tighten carrier SLAs for FC lanes repeatedly tied to “Late Delivery”.
- QC and sizing controls: Introduce pre-shipment checks for Fashion, publish size charts/fit guidance, and vendor scorecards tied to “Damaged/Size/Quality Issue” rates to cut avoidable returns and re-ship costs.

- Shipping policy tuning: For heavy/high-value shipments, adopt threshold-based free shipping or small surcharges; align packaging standards to reduce damage on Electronics and bulky Apparel.

### **Strategic recommendations**

- Discount governance on high-ticket items: Cap routine discounts on Laptops/Mobiles (e.g.,  $\leq 10\text{--}15\%$ ) and require pre-promo contribution math that includes COGS and ShippingCost; run short, targeted offers only where conversion elasticity is proven.
- Bundle over deep cuts: In Electronics, pair modest discounts with accessories/warranty bundles; in Fashion/Beauty, shift to threshold offers to lift AOV without margin collapse on single SKUs.
- Category-specific playbooks: Maintain conservative promos in Electronics; allow selective event promos in Beauty/Accessories with basket targets; in Apparel/Footwear, pair any promo with fit/QC interventions to prevent returns.

### **KPI framework for the dashboard**

- Average Discount % by Category/Region/Segment with outlier detection to prevent promo creep; trend weekly.
- Operational Profit and Margin:  $\text{Profit} = \text{NetSales} - \text{COGS} - \text{Shipping}$ ;  $\text{Margin \%} = \text{Profit} \div \text{NetSales}$ ; show by Region  $\times$  Segment and by ProductCategory.
- Revenue Lost Due to Discounts:  $\text{sum}(\text{Quantity} \times \text{UnitPrice}) - \text{NetSales}$  by Category and campaign windows to quantify list-to-net erosion.
- Delivery Delay Days and Return Rate % with ReturnReason mix, filtered by FulfilmentCenter and Region to tie promo timing to ops outcomes.

### **Priority actions for next 4–6 weeks**

- Stand up a “Promo Control” measure set and executive view: Discount %, Revenue Lost, Profit/Margin, Delay, Return Rate—filtered by Category and FC lanes—to gate all new promotions.
- Pilot two interventions: bundle-first offers for Electronics in West/East regions, and fit/QC enhancements for Apparel/Footwear in FC lanes with repeated Size/Damaged returns; compare contribution and return deltas week over week.