

SQL Sales & Operational Analysis

A Data-Driven Strategy for Revenue Recovery and Customer Growth

via SQL Transactional Insights

Revenue & Transactional Behavior

Analyzing the mechanics of order value and volume

REVENUE CONCENTRATION DRIVERS



Value Skew

The dataset contains 100 order values with average order value (**₹4,861**) significantly exceeds the median (**₹4,106**), indicating that revenue is primarily fueled by premium, high-ticket transactions.



Basket Behavior

Customers purchase an average of **3 items per order (above ₹5,000)**. Revenue growth is basket-size driven rather than pure order frequency.

CUSTOMER VALUE CONCENTRATION

55%
OF TOTAL REVENUE

The VIP Pareto Effect

Just 4 customers—**Aman, Ayesha, David, and John**—contribute more than half of the total business revenue.

Strategic Meaning: This business is **Retention-Driven**. Losing a single high-value customer would result in a material financial impact.

Product & Market Performance

Revenue drivers across categories and geography

TOP REVENUE PRODUCTS



Phones and Keyboards dominate top-10 highest-value orders, especially when purchased in bulk. Brand demand is balanced across Dell, Samsung, Lenovo, and Apple. Monitors underperform overall, but show high spend from niche customers.

GEOGRAPHIC DEMAND PEAKS

Delhi & Mumbai Dominance

These two cities account for **52% of total demand**. While demand is stable elsewhere, Mumbai specifically shows high repeat behavior coupled with operational friction.

- ✓ Concentrate inventory in Delhi/Mumbai hubs
- ✓ Mumbai requires localized fulfillment fix
- ✓ Bangalore/Kolkata: Stable expansion zones



Operational Health & Risk Metrics

The critical bottleneck between demand and revenue

THE FULFILLMENT CRISIS



Strategic Insight: Operational inefficiencies, **not demand**, are the primary barrier. 71% of orders fail to realize revenue, specifically hitting high-value bulk transactions.

STRATEGIC ACTION PLAN



Engagement and Retention

VIP handling for ₹60k+ customers; Growth incentives for mid-tier customers ; Personalize offers using customer–product purchase history ; Focus retention spend on high-value repeat customers, not low-impact buyers.



Bulk Focus

Promote bulk bundles for Phones, Keyboards, and Laptops ; Use Monitors as bundle add-ons, not standalone pushes ; Avoid discounting products that already sell at high value ; Launch volume-based pricing for bulk buyers.

STRATEGIC ACTION PLAN



Geographic & Marketing Strategy

Concentrate marketing and inventory in Delhi and Mumbai ; Use Bangalore and Kolkata for controlled expansion ; Test pricing, delivery SLAs, and offers city-wise instead of nationally.



Fulfilment

Orders > ₹10,000 receive priority handling ; Reduce cancellations by: Faster payment confirmation , Proactive delivery communication and Strengthen logistics specifically in high-volume cities. Track city-product cancellation hotspots for corrective action.

Conclusion

Using SQL-driven analysis of 100 sales transactions, this project identified strong revenue concentration among a small group of repeat customers, high dependence on bulk purchases of premium electronics, and significant geographic demand centered in Delhi and Mumbai. Product-level analysis revealed keyboards, laptops, and phones as the primary revenue drivers, while customer-level aggregation highlighted retention as the most effective growth lever. Despite strong demand and dominance of mainstream PG/G order categories, a high proportion of cancelled and pending orders—particularly among high-value transactions—indicates that operational inefficiencies, rather than demand limitations, are the primary barrier to revenue realization. Overall, the findings demonstrate that targeted customer engagement, product bundling, city-specific strategies, and value-based operational prioritization can significantly improve customer engagement, profitability, and operational efficiency.