

# Retail Sales Dataset – Analytical Report

## 1. Dataset Overview

- Total Records: 1,000
- Total Features: 16
- Timeframe: 345 unique days in 2023
- Coverage: Multi-category products sold across 12 cities and 4 regions
- Data Quality: ☒ No missing values (clean dataset)

## 2. Customer Demographics

- Gender Split:
  - Female: 51.6%
  - Male: 48.4%
  - Balanced, slightly female-dominated.
- Age Distribution:
  - Range: 18 – 64 years
  - Average Age: 41 years
  - Peak segment: 30–50 years

✦ Insight: The customer base is mainly working professionals and families.

## 3. Product & Category Insights

- Categories: Clothing, Electronics, Furniture, Grocery
- Most Popular Category (by orders): Clothing (259 orders)
- Top Product (by frequency): Tablet (85 orders)
- Average Units Sold: 5 per order
- Price Range: ₹109 – ₹4,999

✧ Insight: Clothing is volume-driven; Electronics & Furniture bring higher value.

## 4. Sales & Profitability

- Revenue per Order:
  - Average: ₹11,596
  - Max: ₹42,732
- Profit per Order:
  - Average: ₹2,945
  - Max: ₹15,942
  - Average: Profit Margin: ~25%
- Discounts:
  - Average: 10%
  - Range: 0 – 20%

✧ Insight: Profitability is healthy, but discounts need optimization to prevent margin erosion.

## 5. Regional & City Distribution

- Regions Covered: North, South, East, West
- Top Region (by orders): North (27%)
- Top City: Delhi (99 orders)

✧ Insight: Strong performance in North India; scope to expand in South/East.

## 6. Recommendations

1. Customer Targeting
  - Run digital campaigns for professionals aged 30–50.
  - Create gender-tailored promotions (e.g., lifestyle products for women, gadgets for men).
2. Product Strategy
  - Use Clothing as an entry point (volume driver).

- Bundle Electronics + Furniture for higher-value sales.
- Explore seasonal campaigns (festivals, back-to-school, Diwali).
- 3. Pricing & Discounts
  - Apply dynamic discounting: higher discounts on slow-moving items, minimal on high-demand products.
  - Monitor discount vs. profit correlation to avoid revenue leakage.
- 4. Regional Expansion
  - Invest in South & East India with local promotions.
  - Partner with regional influencers to boost brand visibility.
- 5. Customer Retention
  - Launch loyalty programs (points, cashback).
  - Personalize offers using customer purchase history.

## 7. Conclusion

The dataset reveals a healthy sales performance with 25% average profit margins, strong customer engagement in North India, and balanced gender demographics.

- Clothing drives order volume, while Electronics and Furniture provide high revenue.
- Discount policies need refinement to maintain profitability.
- Expansion opportunities lie in the South and East regions, supported by targeted campaigns.

✦ Overall: With optimized discounting, regional expansion, and targeted marketing, the company can significantly increase revenue while sustaining profit margins.