UrbanMart Retail Optimization Analysis

Prepared by: Arsen Tagibekov

Date: March, 2025

Contents

Business Background

- UrbanMart is a growing U.S. retailer

- Operating across regions, expanding product

  lines

- Concern: Profitability stagnant despite rising

  sales

Problem Statement

- Losses in some sub-categories

- Discounting practices eroding margins

- Poor visibility into regional, product, and

  customer performance

Project Objectives

- Identify top/bottom-performing products
- Segment customers by profitability
- Regional sales & margin analysis
- Analyze discounting impact
- Recommend pricing, product, and strategy improvements

Methodology

- **Data Sources:** Sample Superstore (Tableua public datasets)
- **Tools:** Python, Excel, Tableau
- **Activities:**
  - Data Cleaning (Excel, Python)
  - EDA (Python + Pivot Tables)
  - KPI Analysis
  - Visualization (Tableau)

Exploratory Data Analysis (EDA)

- **Top Seller:** Canon imageCLASS 2200 Copier (~$61K in sales)

- **Low-Profit Sub-Categories:** Tables, Bookcases → Net losses

- **Most Profitable Segment:** Home Office

- **Strongest Region:** West (~$725K)

- **South Region:** Lowest revenue, high discounting

- **Discounting impact:** Negative correlation with profit, especially >30% discounts

KPI Summary

| KPI	Formula	Result
Gross Revenue	`df['Sales'].sum()`	~$2.3M
Total Profit	`df['Profit'].sum()`	~$286K
Profit Margin	`Profit / Sales`	~12.5%
Average Order Value (AOV)	`sum(Sales) / number of orders`	~$458
Sales by Category	`groupby('Category')['Sales'].sum()`	Tech > Furniture > Supplies

Tableau Dashboard Preview

- Interactive filtering by region, category, segment, and discount

- Helps to explore where profit is declining or where promotions are most effective
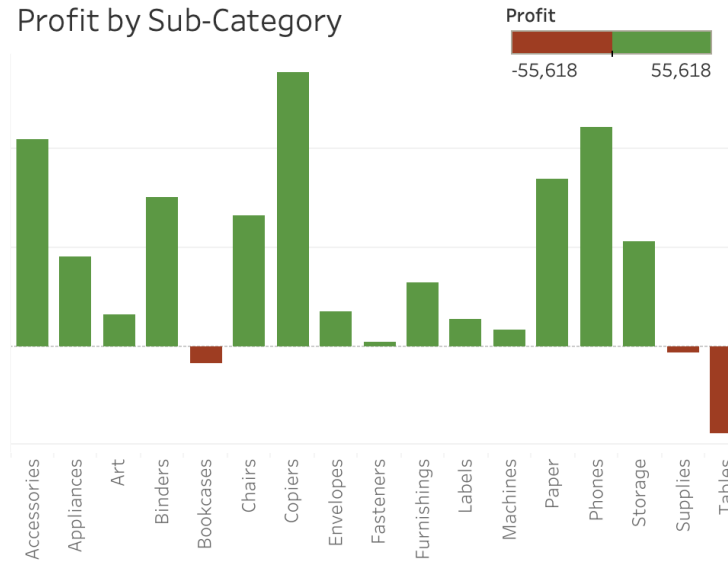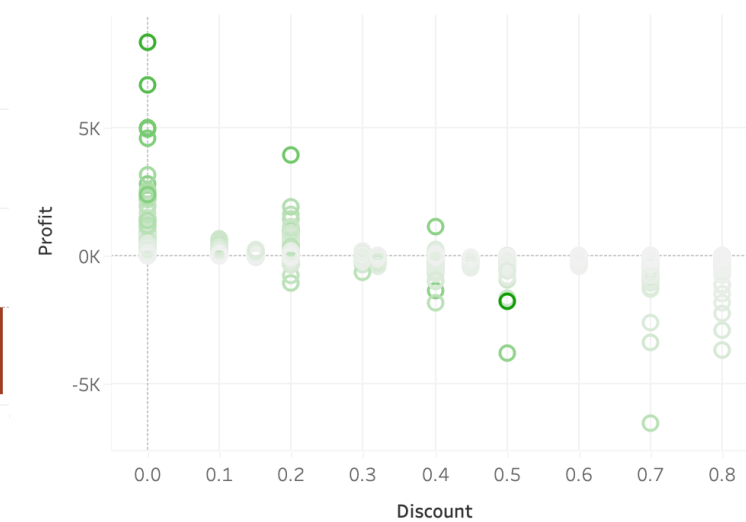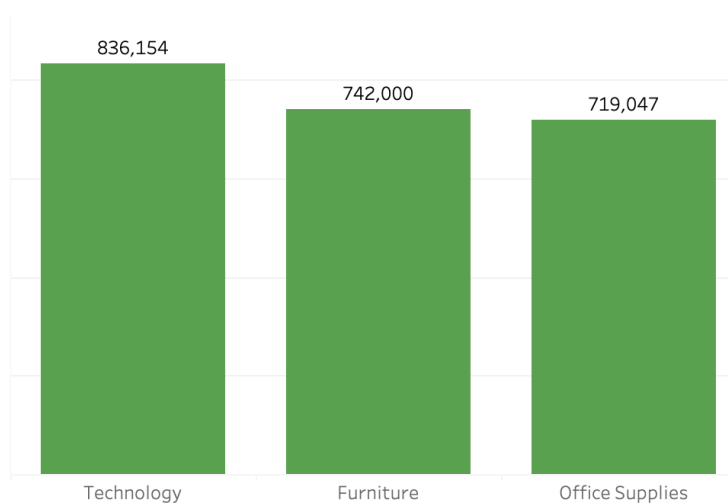
Key Recommendations
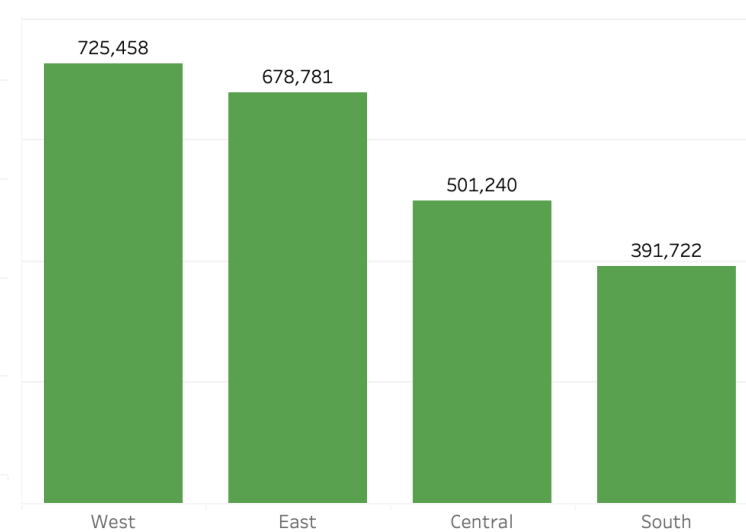
Cut or revise pricing on low-margin products

Promote top-sellers (Phones, Binders, Accessories)

Focus on Home Office segment (high margin)

Cap discounts to 20% for low-margin categories

Audit the South Region and replicate West's strategy

Business Impact

- Improved **margin protection** through discount policy

- Boosted **profitability per customer** via segmentation

- Increased **regional efficiency** through focused campaigns

- Strategic use of **dashboards** to monitor KPIs in real time

Conclusion & Next Steps

- Data-driven optimization led to actionable insights

- Visual tools contribute to better decision-making

- Next steps: integrate findings into pricing + campaign strategy

Thank you for your attention !