Sample Superstore Sales & Profit Analysis Project

By Kelvin Chukwuneke Data analyst| Portfolio project



Project objectives



Analyze sales and profit performance across categories, subcategories, ship modes, states, and cities.



Understand how discounts impact sales and profitability.



Create KPIs for quick performance monitoring.



Present insights in a professional, multi-page dashboard.

Data Preparation (Google Sheets + Tableau)

Google sheets steps

- Cleaned dataset for consistency and formatting.
- Verified numeric fields (Sales, Profit, Quantity, Discount).
- Created calculated fields:
 - Profit Margin = Profit / Sales
 - Discount Range = grouped discounts into bands (0–10%, 10–20%, etc.)

Tableau steps

- Imported the cleaned dataset from google sheets
- Validated calculations and aggregations.
- Built KPI tiles and interactive dashboards.

Dashboard 1: Sales & Profit overview

Total Sales

\$2,297,201

Total profit

\$286,398

Quantity Sold

37,873

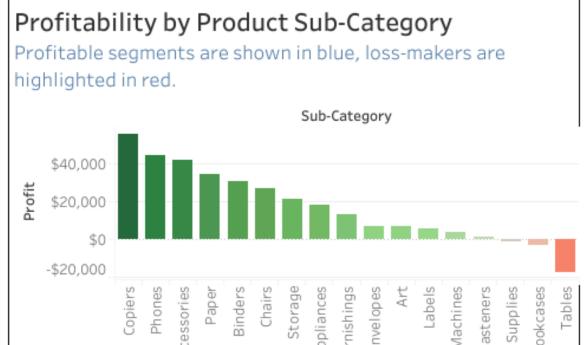
15.6%

Avg. Discount

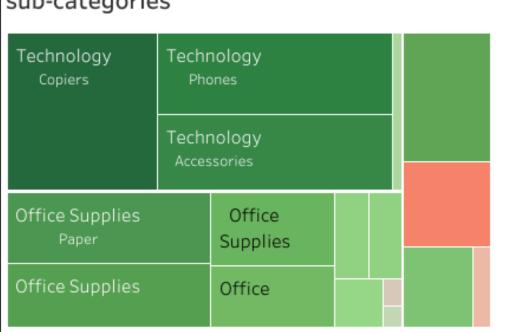
Top selling product sub-categories

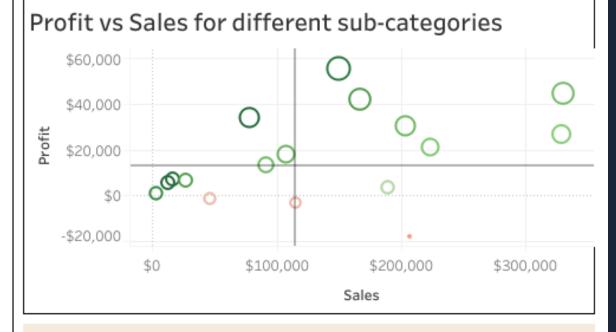
The sales of all product sub-categories visualized from top





Profit breakdown by cateories and sub-categories



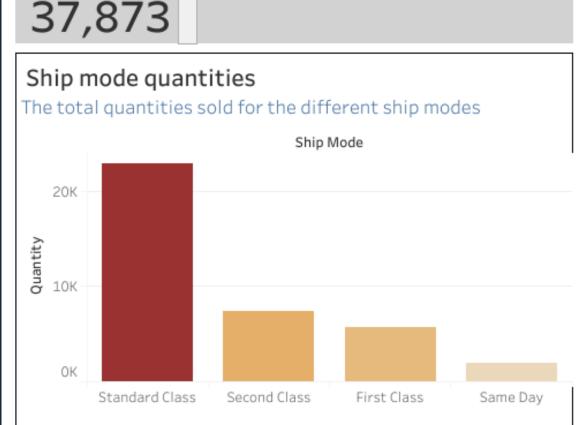


Phones generate the highest sales while tables are the least profitable product sub-category.

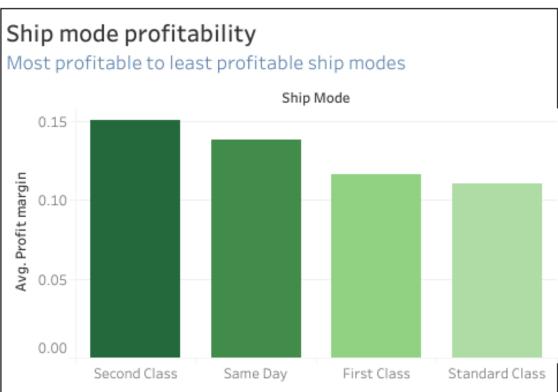


- Phones lead in both sales and profit, making them the strongest performing sub-category.
- Tables drive high sales but record losses, indicating pricing or cost issues.
- Technology products (Copiers, Phones, Accessories) are the main profit drivers, while some Furniture and Office Supplies drag profitability down.

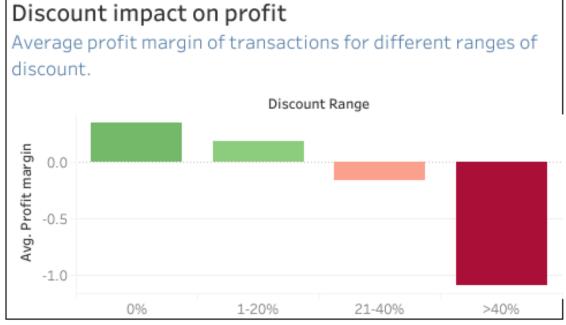
Dashboard 2: Shipping & Discount Analysis



Quantity Shipped









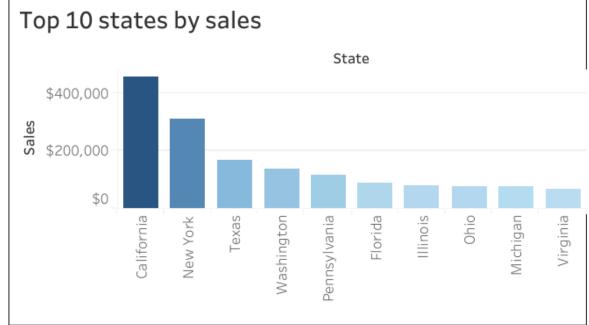
Most products are shipped via Standard Class, which accounts for the majority of quantities shipped but profitability stronger in faster shipping modes like **Second Class** and **Express Class**. Discounts above **20**% consistently erode profit margins, suggesting the need for tighter discount controls.



- Standard Class dominates shipments, but faster modes like Second Class and Same Day yield stronger profit margins.
- High discounts erode profitability, with margins turning negative when discounts exceed 20%.
- Profitability is maximized at lower discount ranges, reinforcing the need for tighter discount control.

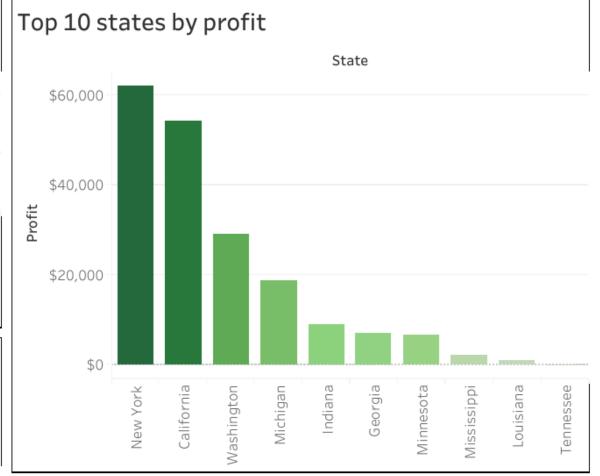
Dashboard 3: State & City Performance











- Core Profit Centers: Profitability is concentrated in the top 3 states: NY, CA, and WA.
- Strong Alignment: Our top-selling cities are also our most profitable, demonstrating healthy performance in key markets.
- **Growth Potential:** Mid-performing states represent a significant opportunity to expand profitable revenue.



- California and New York dominate sales, with California leading in revenue and New York in profitability.
- Top cities align in sales and profit, as New York City, Los Angeles, and Seattle drive both high sales and strong margins
- Growth opportunities exist in mid-tier states, where performance can be scaled to boost overall profitability.

KEY INSIGHTS

- 1. Phones are the strongest revenue and profit driver Phones generated the highest sales (over \$300,000) while also contributing significantly to profitability, making them a core product line for sustaining business growth.
- 2. Tables generate strong sales but incur losses

 Despite ranking among the top-selling sub-categories,

 Tables recorded a **net loss of nearly \$20,000**,

 indicating pricing inefficiencies or cost pressures that undermine profitability.
- 3. Technology dominates profit contribution
 Sub-categories such as Copiers, Phones, and
 Accessories account for the bulk of total profit, while certain Furniture and Office Supplies (e.g., Tables, Bookcases) drag down margins.

RECOMENDATIONS



Strengthen Technology Portfolio: Continue investing in Phones, Copiers, and Accessories, as they represent the most profitable growth avenues. Marketing and supply chain support should be prioritized for these segments.

Address Loss-Making Products: Reassess pricing and discounting strategies for Tables and Bookcases. Explore cost optimization or vendor renegotiation to restore profitability.

Refocus Resources: Consider shifting resources from underperforming categories toward highmargin sub-categories, ensuring overall profitability is maximized while maintaining market coverage.

Conclusion



This project demonstrates my ability to:

- Prepare and clean data in Google Sheets.
- Create calculated fields (Profit Margin, Discount Range).
- Build multi-page Tableau dashboards.
- Translate data into actionable business recommendations.

Next steps



- Incorporate time-series data for trend analysis.
- Extend dashboards to include customer-level metrics.
- Automate reporting for recurring decision support.

This project highlights my skills in data preparation, visualization, and analytical storytelling — all essential for a data analyst role.