

# Super Stores Sales Distribution Report

## Objective

This dashboard provides insights into the sales performance and profitability of superstores across various regions, product categories, and customer segments. It aims to answer critical business questions regarding which products, regions, and segments are driving profitability and where improvements or optimizations are necessary to increase overall business performance.

## Audience

This report is designed for the executive management team to aid in strategic decision-making related to resource allocation, discount strategies, and regional marketing efforts.

## Data Overview

The data visualized in the dashboard comes from superstores, covering key metrics such as total sales, profit, product distribution, discounting impact, and regional performance across the United States. The dataset is segmented into three primary categories: **Furniture**, **Office Supplies**, and **Technology**, as well as customer segments like **Consumer**, **Corporate**, and **Home Office**.

## Metrics Tracked

The dashboard focuses on the following key performance indicators (KPIs):

1. **Sales and Profit:** Across categories and sub-categories.
2. **Discount Impact on Profit:** The relationship between the level of discount offered and profit generated.
3. **Quantity Sold:** How product quantity relates to profitability.
4. **Segment Sales:** Distribution of sales among different customer segments (Consumer, Corporate, Home Office).
5. **Regional Distribution:** Sales, profit, and quantity sold in different U.S. regions.
6. **Profit Spread Across the Country:** A geographical representation of profit distribution state by state.

## Analysis and Insights

### 1. Category Distribution

- **Top Performers:** Office Supplies (especially Binders and Paper) report the highest quantities sold, reflecting their essential nature in operations.
- **Negative Profitability:** Furniture, specifically **Bookcases** and **Tables**, shows negative profitability, despite selling significant quantities. This is likely due to high discounting or inefficient pricing strategies.

### 2. Discount vs. Profit

- Discounts greater than **30%** are consistently associated with **negative profits**, as evidenced by products showing losses up to **-\$5,000** when heavily discounted.

- Moderate discounts around **10-15%** still generate significant profit, with the highest profit at **\$8,400** observed at around **10%** discount. This suggests a strategic discounting approach could balance competitiveness and profitability.

### 3. Profit vs. Quantity

- Products with higher profits also tend to have higher quantities sold. For instance, quantities exceeding **5,000 units** correlate with profits of up to **\$8,400**. This highlights that scaling sales volume is an effective strategy for increasing overall profit.

### 4. Segment Sales

- The **Consumer** segment dominates sales, accounting for **50.56%** of the total, followed by the **corporate** segment with **30.74%**. **Home Office** represents the smallest share at **18.70%**, indicating a potential area for growth with targeted marketing or product development.

### 5. Region Distribution

- The **West** region, particularly **California**, emerges as the most profitable region, with sales of **108,418** units and a profit of **\$76,381**.
- The **East** region performs well in terms of sales but shows lower profit margins compared to the West, suggesting higher operational or supply chain costs.
- The **Central** region, despite a fair quantity sold, posts significantly lower profits, warranting investigation into operational inefficiencies.
- **Colorado** and **Oregon** report the largest losses, with **Colorado** recording a loss of **-\$6,528**, which is concerning for a state-level market strategy.

### 6. Profit Spread Across the Country

- A geographical analysis shows that states like **California** and **Illinois** significantly contribute to the overall profitability of the superstores.
- However, states such as **Colorado** and **New Mexico** face substantial losses, which could be due to inefficient operations or underperforming regional marketing campaigns.

## Trends and Patterns

- **Discount Sensitivity:** Higher discount levels negatively affect profit margins, suggesting that offering excessive discounts might not be sustainable in the long term.
- **Regional Imbalance:** The Western U.S. consistently shows strong sales and profit numbers, while Central and some Eastern states, including Colorado and Oregon, face losses.
- **Consumer Dominance:** The Consumer segment outperforms other segments, accounting for more than half of total sales. There is room to expand corporate and home office sales by enhancing offerings tailored to these segments.

## Outliers and Anomalies

- **Negative Profit in Furniture:** Despite large quantities being sold in sub-categories such as **Tables** and **Bookcases**, profits are negative. This could indicate issues with over-discounting or excessive shipping and operational costs tied to these heavy or bulky items.

