

DATA VISUALIZATION AND STORYTELLING

Tracking Growth: Sales, Profit & Regional Insights

TOTAL PROFIT

286.4K

TOTAL SALES

2.30M

TOTAL ORDERS

9.994K

AVERAGE SHIPPING DURATION

9.35

Sales & Profit Over Time (Monthly Trend)



Profit by Region



Region

Central

East

South

Segment

Consumer

Corporate

Home Office

Business Insights:

Strong Sales Performance:

- With **\$2.30M** in total sales and nearly **10K orders**, the business has built a strong customer base.
- **Profit stands at \$286.4K**, indicating healthy operations, though there may be room to improve profit margins.

Monthly Sales & Profit Trends:

- The **line chart** reveals that while sales remain relatively stable over time, **profit shows more fluctuation**.
- These fluctuations could result from variable discounts, shipping costs, or product performance—highlighting a need for cost-control measures during low-profit months.

Shipping Efficiency:

- The **average shipping duration is 9.35 days**, which may be long for a retail business.
- Improving shipping logistics could enhance customer satisfaction and reduce cart abandonment.

Regional Profit Breakdown:

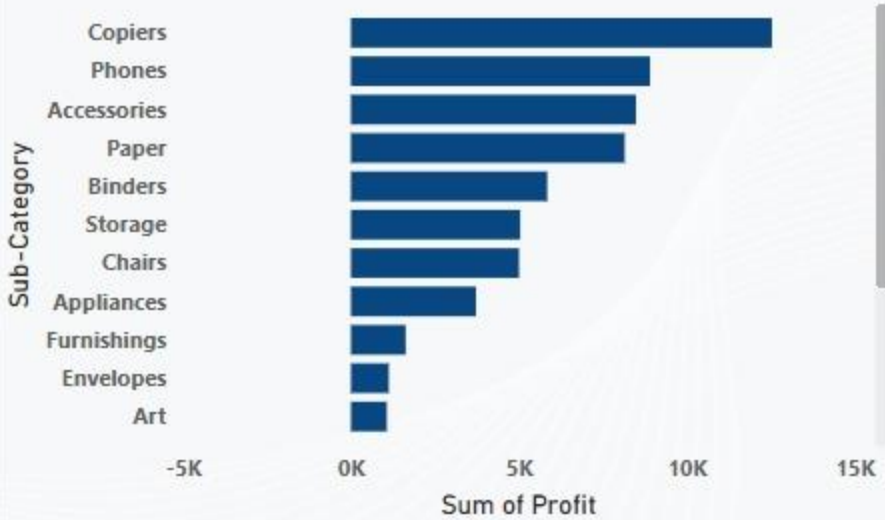
- The **West region is the most profitable**, followed by the East.
- **South and Central** regions show lower profitability, especially **Central**, which may require a strategy review—perhaps around pricing, shipping, or market demand.

Product Performance & Profitability Analysis

Sales vs Profit by Category



Profit by Sub-Category



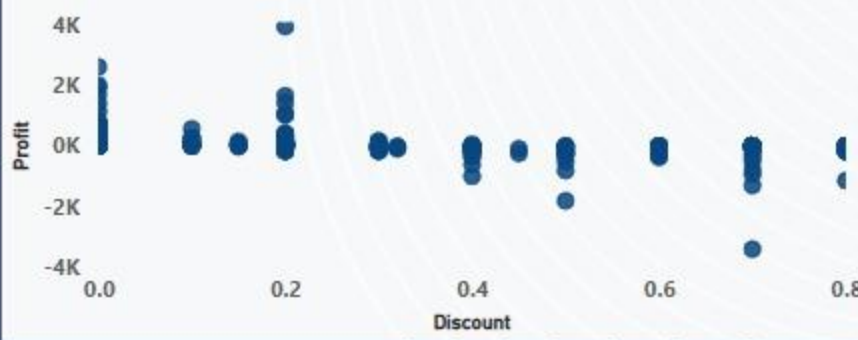
Category



Sub-Category



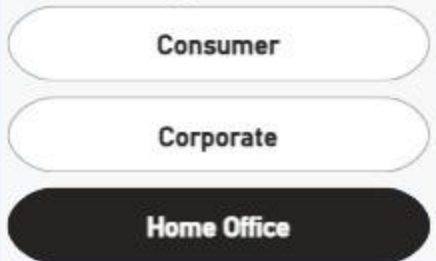
Discount vs Profit



Top 10 Products by Profit

Product Name	Sum of Sales	Sum of Profit
200 Advanced Copier	11,199.97	11,199.97
MF7460 Monochrome Digital Laser Multifunction Copier	3,991.98	3,991.98
ic Punch Plastic Comb Binding Machine with Manual	5,846.55	5,846.55
ack Manager's Chair	7,006.51	7,006.51
	53,922.78	53,922.78

Segment



Business Insights:

Category-Level Performance:

- **Technology** and **Office Supplies** categories are generating strong sales and profits.
- In contrast, **Furniture** has **high sales but negative profitability**, indicating potential issues such as high discounts, supply chain inefficiencies, or low-margin products.

Sub-Category Profitability:

- Top-performing sub-categories include **Copiers, Phones, and Accessories**—these should be prioritized for scaling and promotions.
- **Art, Envelopes, and Furnishings** are **losing money**, suggesting they may require reevaluation or discontinuation if trends continue.

Impact of Discounts on Profit:

- The **scatter plot** shows a clear pattern: **higher discounts often correlate with lower or negative profits**.
- A data-driven discount strategy is necessary to prevent profit erosion—especially in the Furniture category.

Top 10 Profitable Products:

- Products like **Copiers and Binding Machines** consistently appear among the most profitable, reinforcing the value of high-ticket, low-discount items.
- These insights can guide **inventory planning and targeted marketing campaigns**.

Regional Sales & Profit Performance

Region-Level Overview



Profit Distribution Across U.S. States



Category

Furniture

Office Supplies

Technology

Ship Mode

- ☐ First Class
- ☐ Same Day
- ☐ Second Class

State-Level Details

State	Sum of Sales	Sum of Profit	Sum of Discount
California	4,57,687.63	76,381.39	145.60
New York	3,10,876.27	74,038.55	62.40
Texas	1,70,188.05	-25,729.36	364.64
Washington	1,38,641.27	33,402.65	32.40
Pennsylvania	1,16,511.91	-15,559.96	192.90
Florida	89,473.71	-3,399.30	114.65
Illinois	80,166.10	-12,607.89	191.90
Ohio	78,258.14	-16,971.38	152.40
Michigan	76,269.61	24,463.19	1.80
Virginia	70,636.72	18,597.95	0.00
Total	22,97,200.86	2,86,397.02	1,561.09

Top 10 States by Sales



Sub-Category

- ☐ Accessories
- ☐ Appliances
- ☐ Art
- ☐ Binders
- ☐ Bookcases
- ☐ Chairs

Business Insights:

Regional Overview:

- The **West region** is the top contributor in both **sales and profit**, making it a key area to prioritize for growth and investment.
- The **South and Central regions** are underperforming in terms of profit despite moderate sales—this signals potential operational inefficiencies or pricing issues.

State-Level Insights:

- **California and New York** are leading the nation in both sales and profitability.
- **Texas**, while being among the top 5 states by sales, shows **a significant loss in profit**, likely due to excessive discounts (notably the highest total discount among all states).

Profit Distribution on Map:

- The filled/bubble map shows a concentration of profitable states along the **West and East coasts**, with relatively weaker performance in central states.
- This geographic imbalance could inform marketing and supply chain strategies.

Top 10 States by Sales:

- Apart from the front-runners, **Washington and Pennsylvania** also show promising returns with **moderate sales and positive profits**, indicating efficient business operations.

Customer Segmentation & Profitability

Total Customers

9994

Total Sales

2.30M

Total Profit

286.40K

Segment

Consumer

Corporate

Home Office

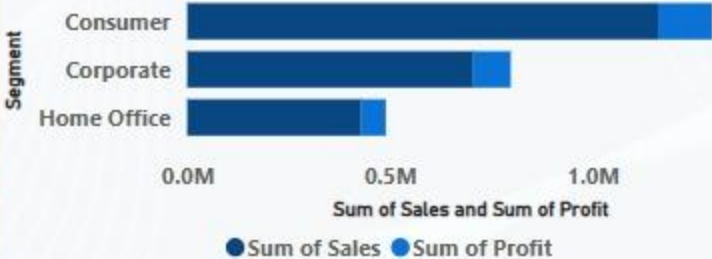
Top Customer Locations by Sales



Top 10 Customers by Sales

Customer Name	Sum of Sales	Sum of Discount
Adrian Barton	14,473.57	4.80
Christopher Conant	12,129.07	3.10
Hunter Lopez	12,873.30	0.20
Ken Lonsdale	14,175.23	5.80
Raymond Buch	15,117.34	1.70
Sanjit Chand	14,142.33	1.40
Sanjit Engle	12,209.44	2.10
Sum of Sales	1,53,811.17	25.00

Sales & Profit by Segment



Category

- ☐ Furniture
- ☐ Office Supplies
- ☐ Technology

Region

- ☐ Central
- ☐ East
- ☐ South
- ☐ West

Order Date (Year)

- ☒ 2014
- ☒ 2015
- ☒ 2016
- ☒ 2017

Discount vs Profit



Business Insights:

Segment-Wise Analysis:

- **Consumer Segment** leads in both **sales and profit**, making it the most valuable customer group.
- **Corporate Segment** contributes moderately to both, while **Home Office Segment** lags significantly.
- Strategic marketing and pricing adjustments for the **Home Office segment** may help improve its profitability.

Top Customers:

- The **top 10 customers** contribute over **\$153K in sales**, highlighting the importance of nurturing high-value clients.
- Discounts offered to top customers are relatively low, indicating **strong sales without heavy incentives**, which is healthy for margins.

Customer Geography:

- Large bubbles on the **U.S. map** highlight **customer clusters** on the **West and East Coasts**, consistent with sales distribution from earlier pages.
- These regions could be targeted for loyalty programs or upselling campaigns.

Discount vs Profit:

- Higher discounts **tend to reduce profit**, confirming a **negative correlation**.
- There's a wide spread in the discount range (up to 8), but many profitable points are seen with **lower discount values**—suggesting better margin control is achievable.

Overall Conclusion:

1. Sales vs Profitability

- **Technology** is the **most profitable** and high-performing category.
- **Furniture**, despite decent sales, often yields **negative profits**, indicating pricing or discounting issues.
- Sub-categories like **Copiers, Phones, and Accessories** drive the highest profit, while **Tables and Bookcases** consistently underperform.

2. Regional Performance

- The **Western region** leads in both sales and profit, followed closely by the **East**.
- **Southern and Central regions** underperform, with relatively lower profit margins.
- **California and New York** are the **top-performing states**, both in sales and profit.
- **Texas and Illinois**, however, show **strong sales but negative profits**, warranting closer attention.

3. Customer Segmentation

- The **Consumer segment** contributes the most to both sales and profit.
- **Corporate** performs moderately well.
- **Home Office** is the **least profitable segment**, suggesting a need for reevaluation of marketing or pricing strategies.

4. Impact of Discounts:

- There's a clear **negative correlation between discounts and profit**.
- Many unprofitable transactions are associated with **higher discounts**, especially in underperforming categories like Furniture.
- Discounting strategies should be **revised or optimized** to protect margins.

5. High-Value Customers & Locations:

- A **small number of customers** contribute a **significant portion of revenue**, highlighting the value of **customer loyalty and targeted marketing**.
- Top sales come from **urban centers**, mainly **West and East Coast locations**.

Final Recommendations:

1. **Reduce discounts** in low-margin categories, especially Furniture.
2. Focus on **profitable products and sub-categories** for promotions and inventory planning.
3. Invest more in **high-performing regions** and **customer segments** like Consumer and the West Coast.
4. Consider **re-targeting or repositioning efforts** in segments and states with low or negative profitability.
5. Monitor **high-value customers** to drive retention and upselling strategies.