

INSIGHTS UNVEILED: SALES AND SHIPPING ANALYSIS THROUGH POWER BI VISUALIZATIONS

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About Datasets:

This analysis utilizes two datasets: ShippingData and SalesData.

1. Shipping Data:

Content: The shipping data contains information about orders, including the shipping mode, customer segment, location (country, city, state, postal code, and region), and details about the products being shipped (category, sub-category, sales amount, quantity, discount, and profit).

2. Sales Data:

Content: The sales data contains information about individual transactions, including the invoice ID, branch, location (city), customer type, gender, product line, unit price, quantity, tax, total amount, date, time, payment method, cost of goods sold (COGS), gross margin percentage, gross income, and customer rating.

- > Understand customer behavior to drive sales and marketing strategies.
- > Enable data-driven decision-making for strategic planning and growth.



Objectives:

- > Improve shipping efficiency by analyzing shipping modes and regions
- > Enhance customer satisfaction by analyzing ratings and feedback.

- > Optimize product performance by identifying top-selling products and profitable categories.

- > Increase revenue by identifying sales trends and opportunities.
- > Improve operational efficiency by streamlining processes.

-Dashboard-

Let's dive into Data Visualizations powered by Power BI's
Dashboard.

286.40K

Total Profit Amount

6.97

Average Product Rating

Comprehensive Sales & Shipping Dashboard

322.97K

Total Sales Amount

0.16

Average Discount Amount

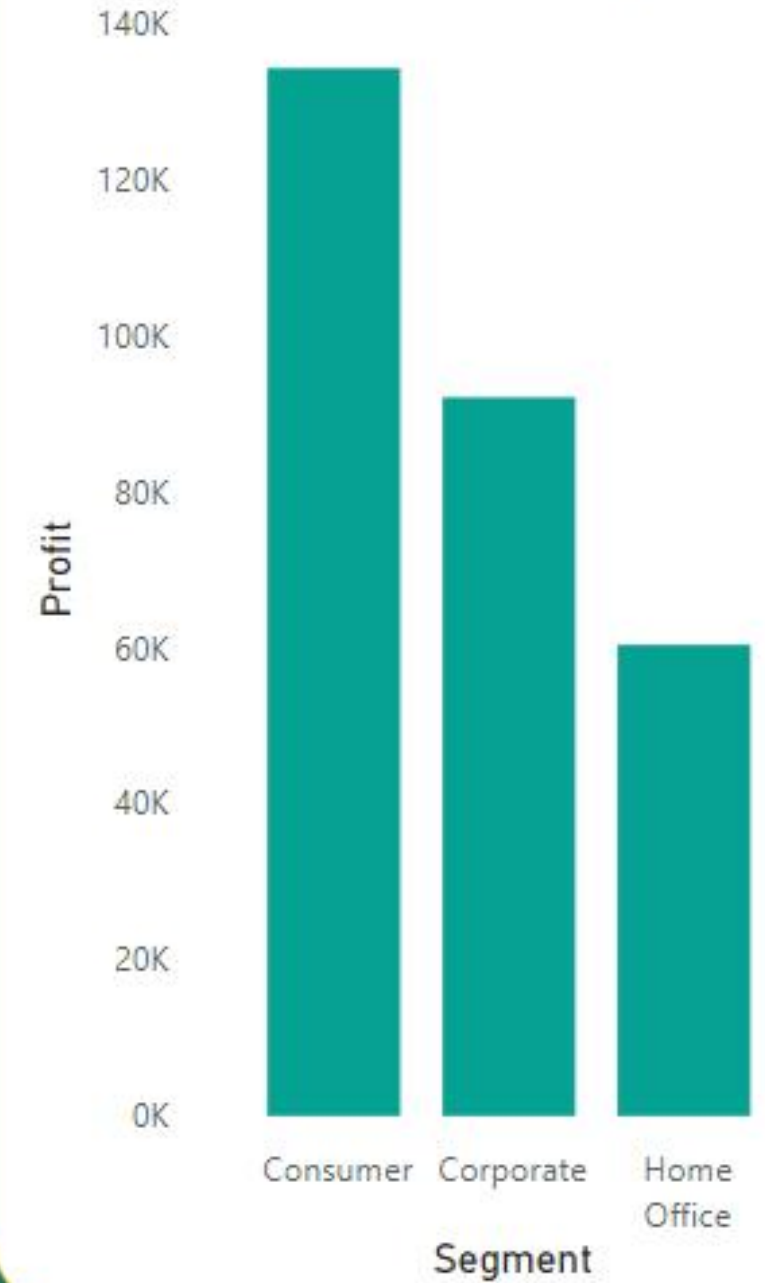
4.76

Average Gross Margin %

55.67

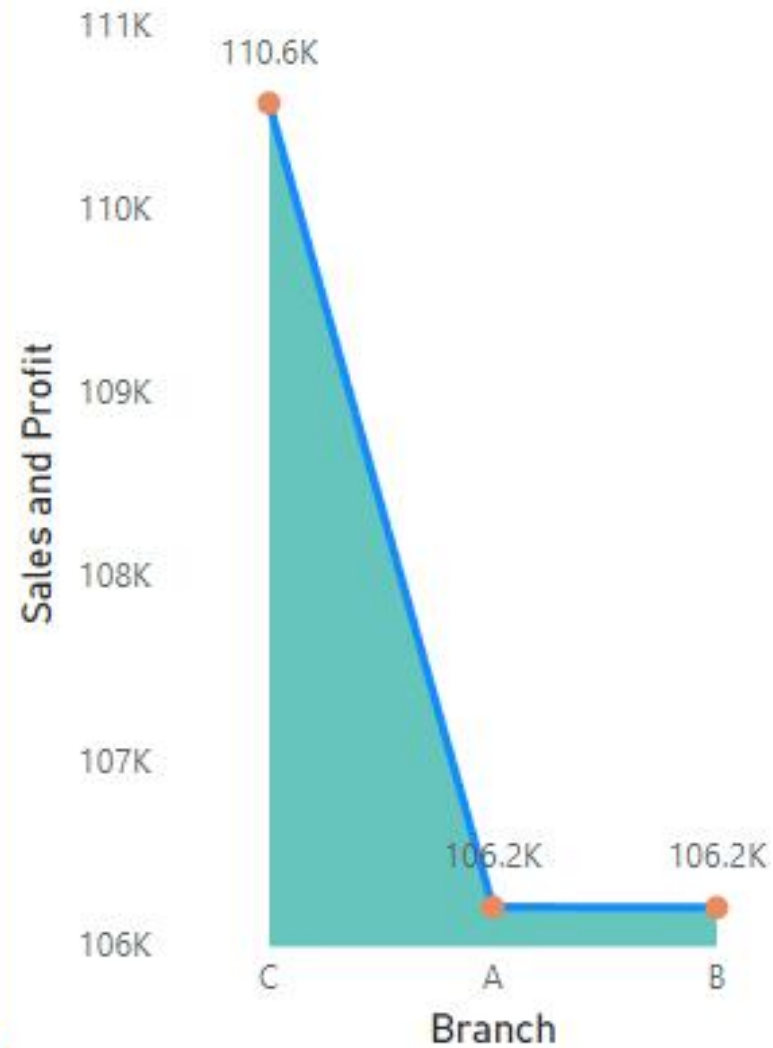
Average of Unit price

Profit Distribution Across Segments



Sales Performance by Branch

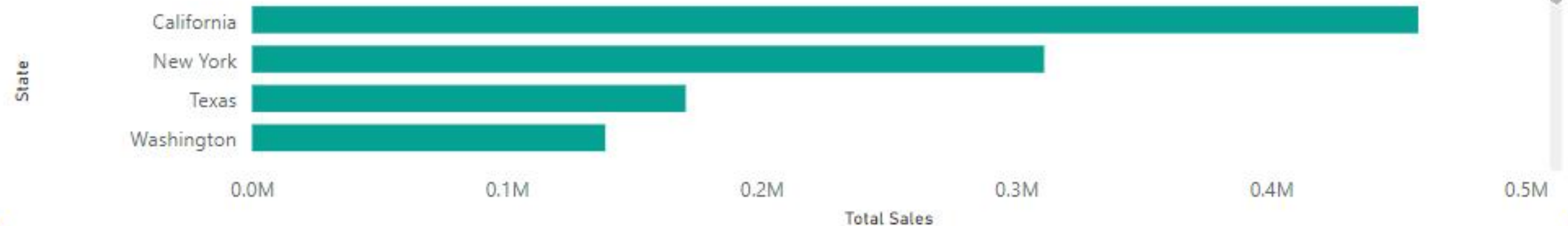
● Sum of Total ● Sum of Profit



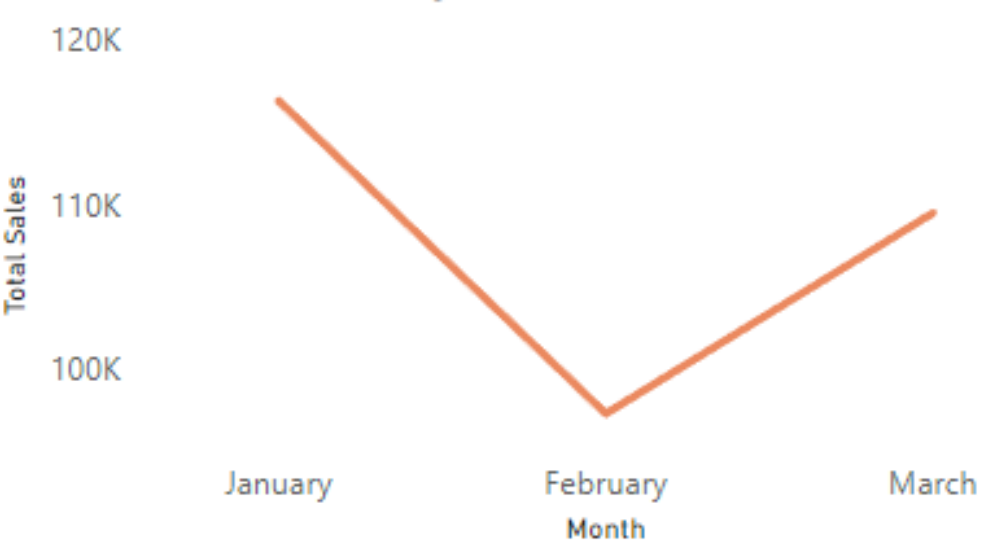
Sales Distribution by Region



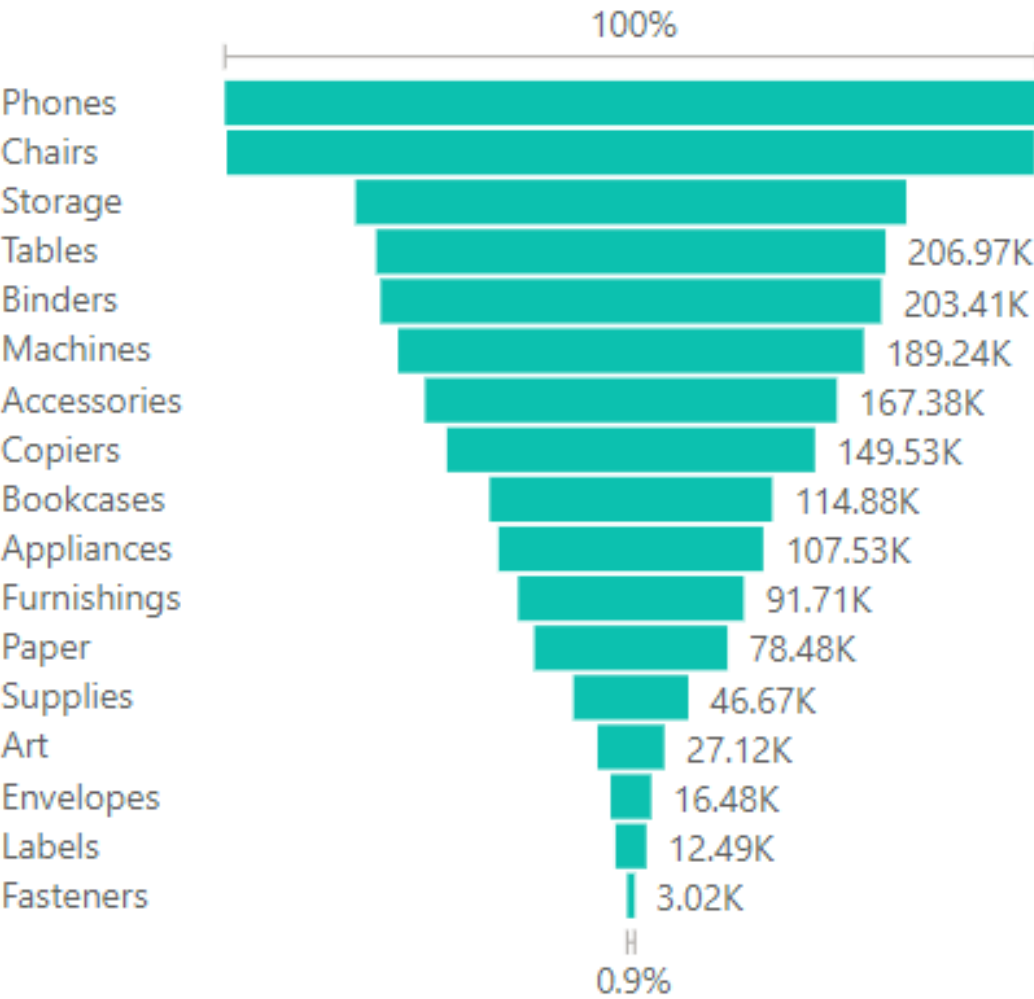
Total Sales by State



Trend of Total Sales by Month



Relationship Between Sales and Profit Margin by Sub-Category



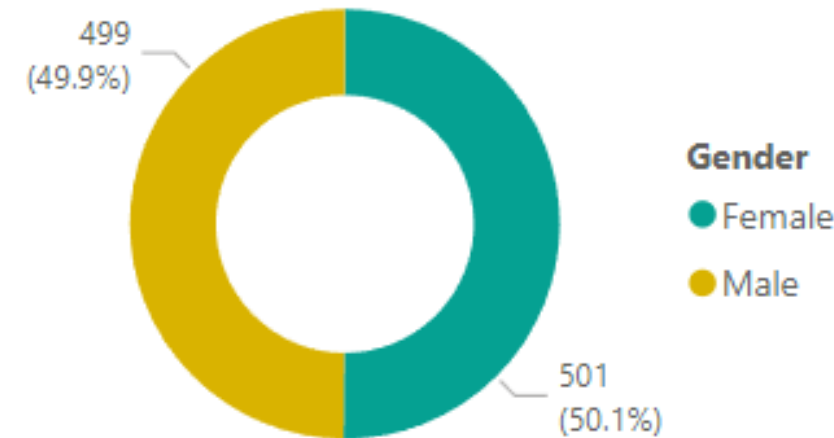
Comprehensive Sales & Shipping Dashboard

Category

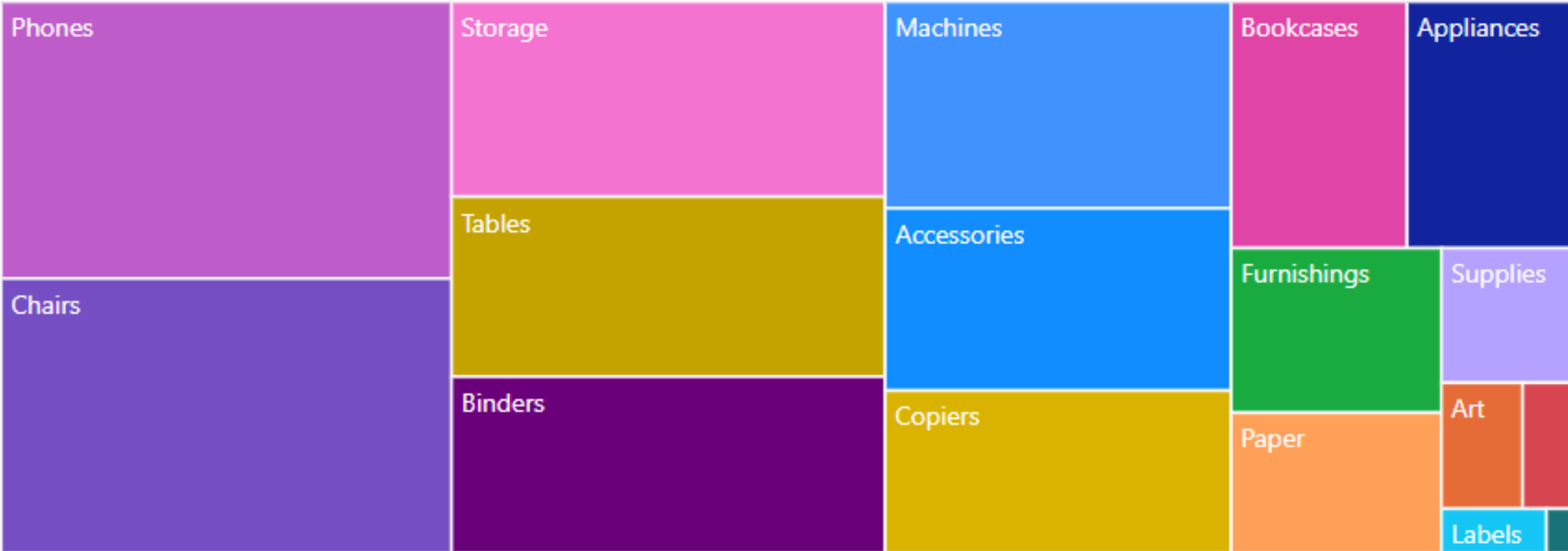
- ☐ Furniture
- ☐ Office Supplies
- ☐ Technology

Year	Quarter	Month	Day
2019	Qtr 1	January	1
2019	Qtr 1	January	2
2019	Qtr 1	January	3
2019	Qtr 1	January	4
2019	Qtr 1	January	5
2019	Qtr 1	January	6
2019	Qtr 1	January	7
2019	Qtr 1	January	8

Customer Gender Demographics

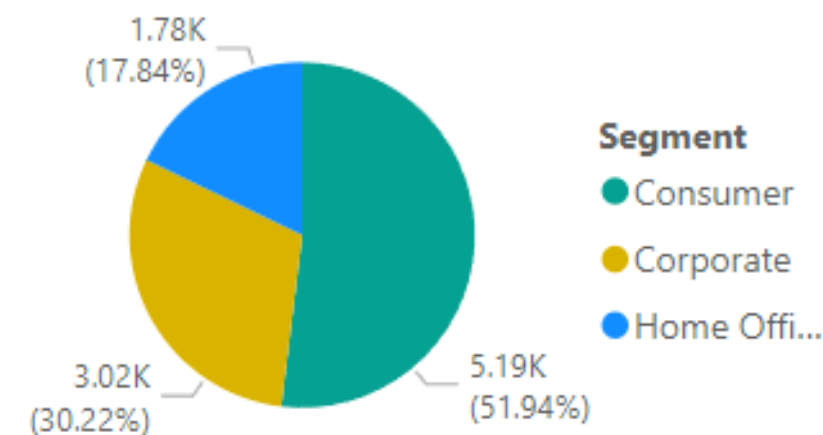


Sales and Quantity distribution by Sub-Category

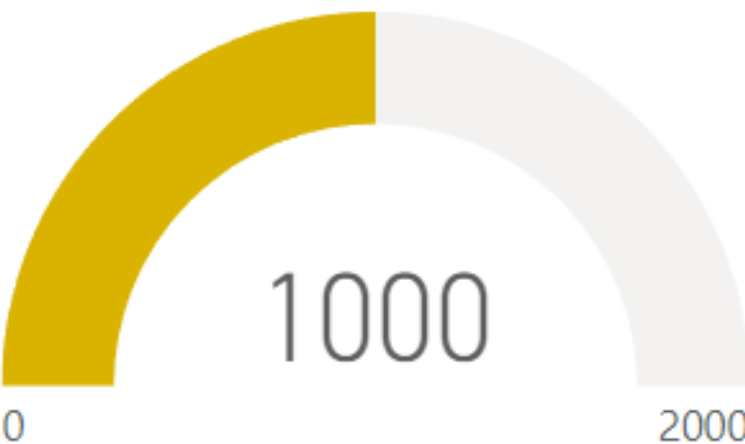


Comprehensive Sales & Shipping Dashboard

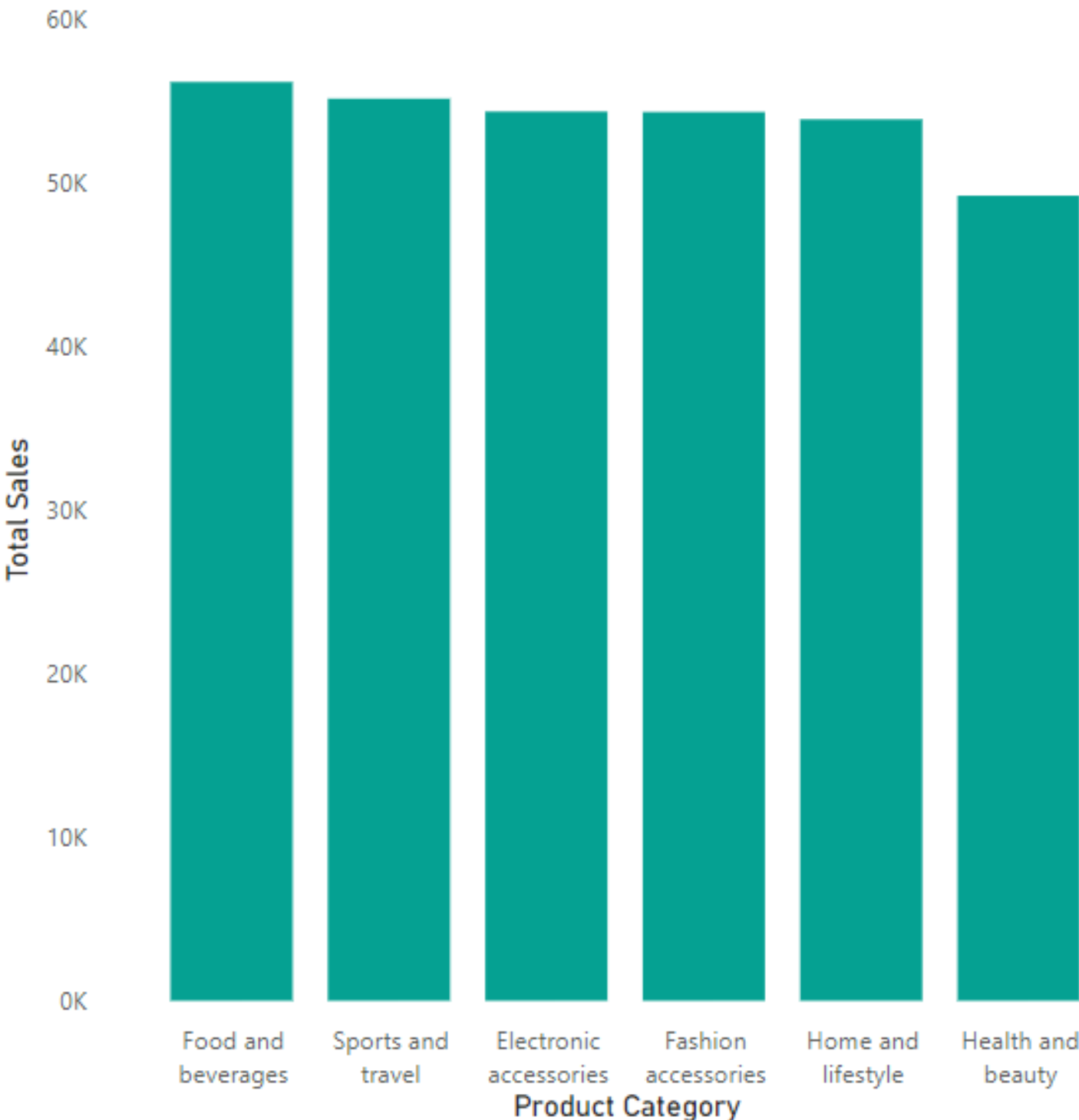
Distribution of Shipping Modes by Segment



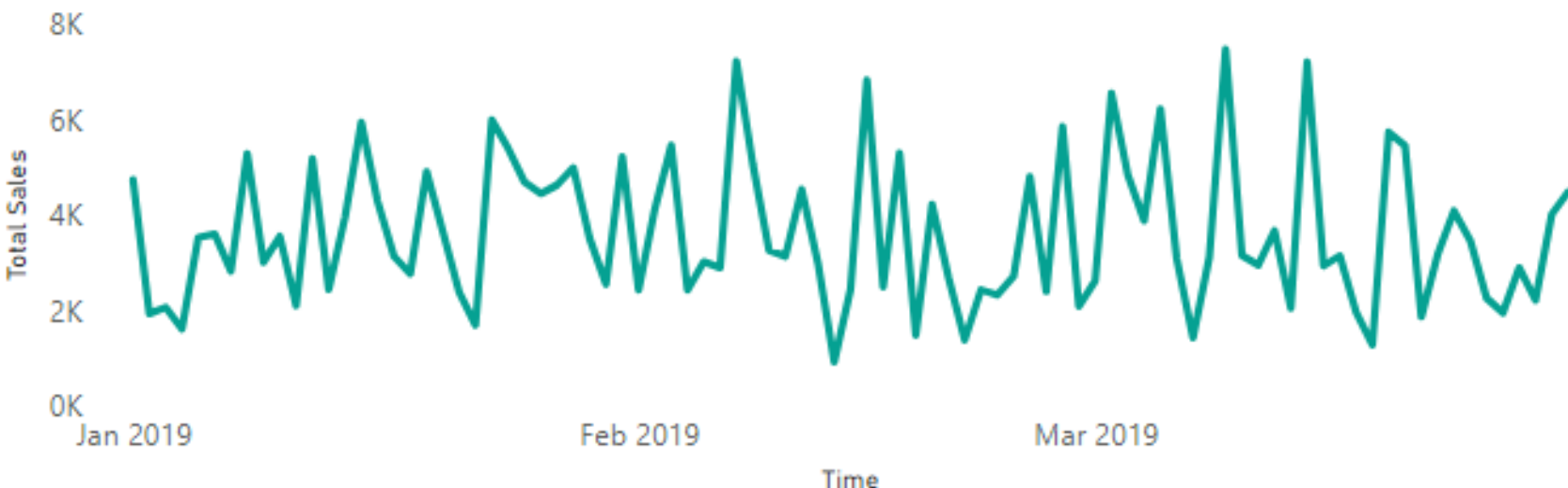
Count of Tax 5%



Sales Comparison by Product Category



Trend of Total Sales Over Time



Insights:

1. Trend of Total Sales Over Time:

- **Insight:** The line chart reveals trends and seasonality in sales, helping identify peak sales periods and potential off-season times. This can aid in planning promotions and inventory management.

2. Sales Comparison by Product Category:

- **Insight:** The bar chart highlights the performance of different product categories, identifying which categories drive the most sales. This can guide marketing efforts and inventory stocking.

3. Profit Distribution Across Segments:

- **Insight:** The column chart shows profit distribution across customer segments, revealing which segments are the most profitable. This helps in targeting high-value customer segments for future sales initiatives.

Insights:

4. Distribution of Shipping Modes:

- **Insight:** The pie chart displays the proportion of different shipping modes used, indicating customer preferences and potential areas to optimize shipping costs and efficiency.

5. Customer Gender Demographics:

- **Insight:** The donut chart provides a visual representation of the gender distribution of customers, helping understand the demographic split and tailor marketing strategies accordingly.

6. Sales Distribution by Region:

- **Insight:** The map visualization identifies regions with higher sales, providing geographical insights into market performance and potential areas for expansion.

Insights:

7. Sales Performance by Branch:

- **Insight:** The area chart compares sales and profit performance across different branches, highlighting top-performing branches and those that may need attention or support.

8. Total Sales by State:

- **Insight:** The clustered bar chart shows the total sales in each state, pinpointing states with the highest and lowest sales, which can inform regional marketing and sales strategies.

9. Sales and Profit Margin Funnel:

- **Insight:** The funnel chart illustrates the relationship between sales and profit margins, highlighting products with high sales but low profit margins, indicating potential areas for pricing or cost improvements.

Insights:

10. Sales vs. Profit Margin Scatter Plot:

- **Insight:** The scatter plot visualizes the correlation between sales and profit margins for different sub-categories, identifying products that perform well in terms of both sales and profitability, as well as those that may need strategic adjustments.

11. Sales Distribution by Category and Sub-Category:

- **Insight:** The tree map provides a hierarchical view of sales by category and sub-category, showing which sub-categories contribute most to total sales within each category, aiding in product focus and development strategies.

Conclusion:

The analysis of the combined shipping and sales datasets has provided valuable insights into customer behavior, product performance, shipping efficiency, and overall financial health. By examining trends, comparing categories, and understanding demographic distributions, we can optimize marketing strategies, improve operational efficiency, and enhance customer satisfaction. These insights enable data-driven decision-making, guiding future business strategies to drive growth and profitability..