Task 2: Data Visualization and Storytelling

Dataset: Superstore Dataset

Tool: Tableau

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Introduction

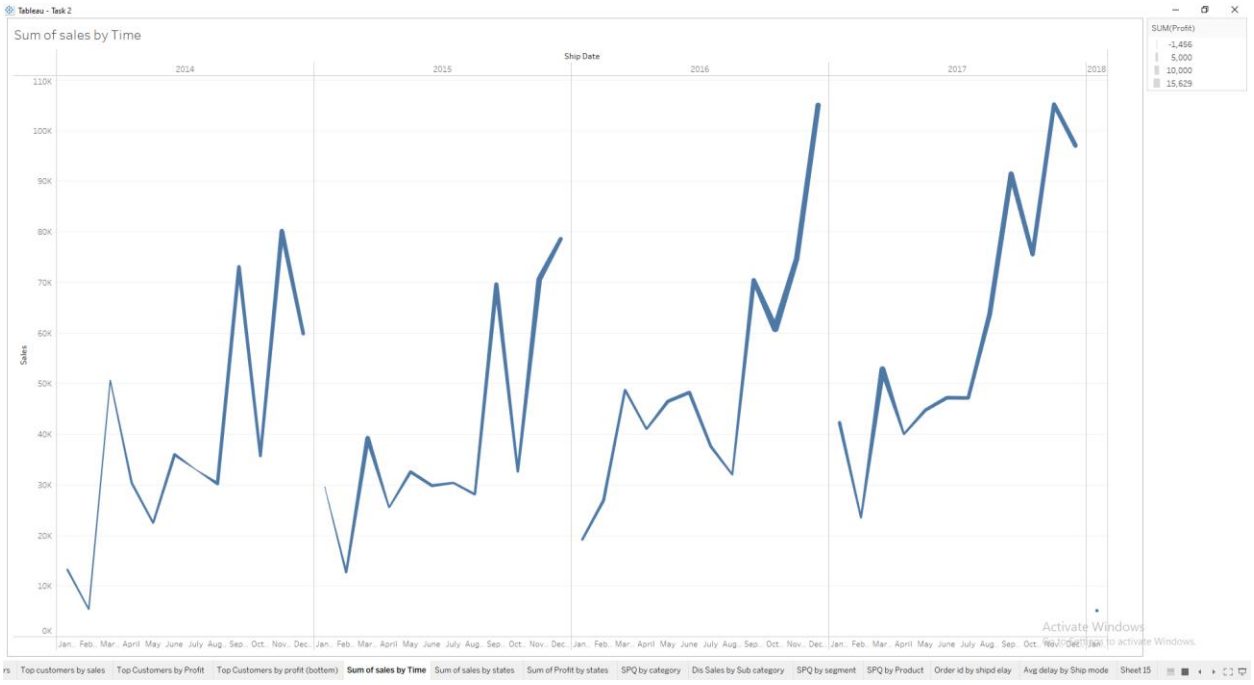
The Superstore dataset is a popular dataset on Kaggle used for learning and practicing data analysis, data visualization, and business intelligence techniques. It simulates a retail company's sales data and is especially useful for understanding key business concepts such as profitability, customer segmentation, and supply chain operations.

Metadata

- Row ID => Unique ID for each row.
- Order ID => Unique Order ID for each Customer.
- Order Date => Order Date of the product.
- Ship Date => Shipping Date of the Product.
- Ship Mode=> Shipping Mode specified by the Customer.
- Customer ID => Unique ID to identify each Customer.
- Customer Name => Name of the Customer.
- Segment => The segment where the Customer belongs.
- Country => Country of residence of the Customer.
- City => City of residence of of the Customer.
- State => State of residence of the Customer.
- Postal Code => Postal Code of every Customer.
- Region => Region where the Customer belong.
- Product ID => Unique ID of the Product.
- Category => Category of the product ordered.
- Sub-Category => Sub-Category of the product ordered.
- Product Name => Name of the Product
- Sales => Sales of the Product.
- Quantity => Quantity of the Product.
- Discount => Discount provided.
- Profit => Profit/Loss incurred.

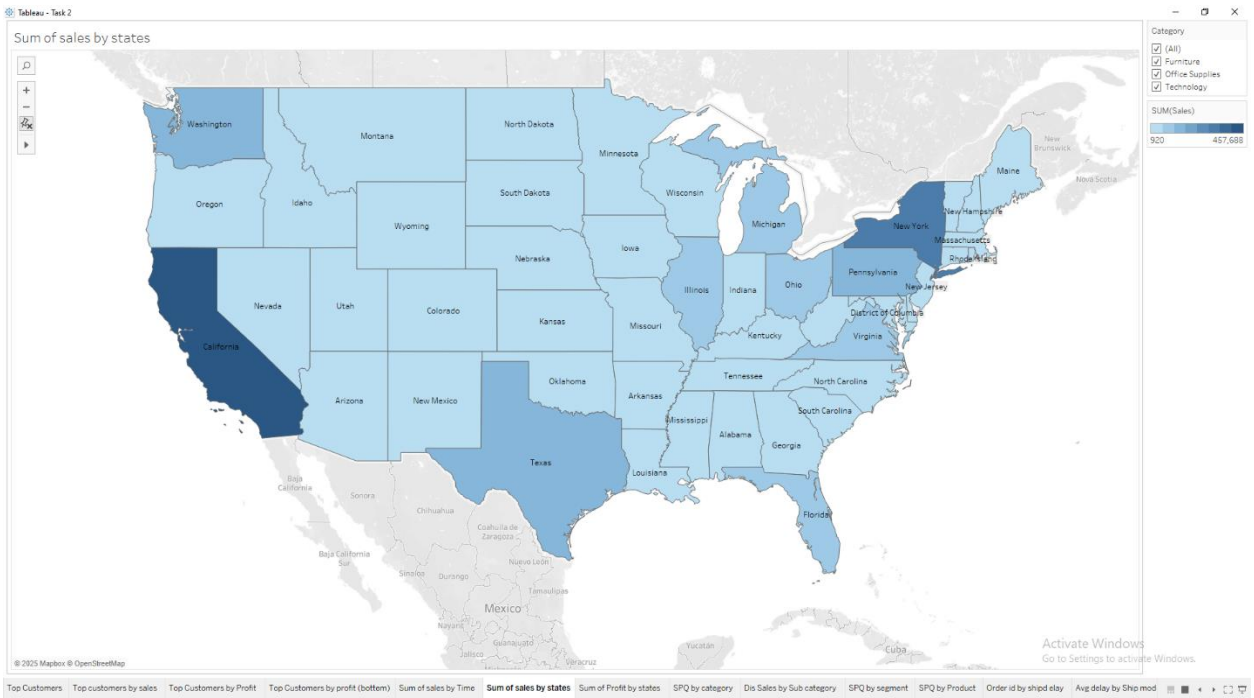
Total Sales = $ 2, 297, 201.00
Total Profit = $ 286, 397.00
Total Quantity = $ 37, 873.00

Sum of Sales by Time



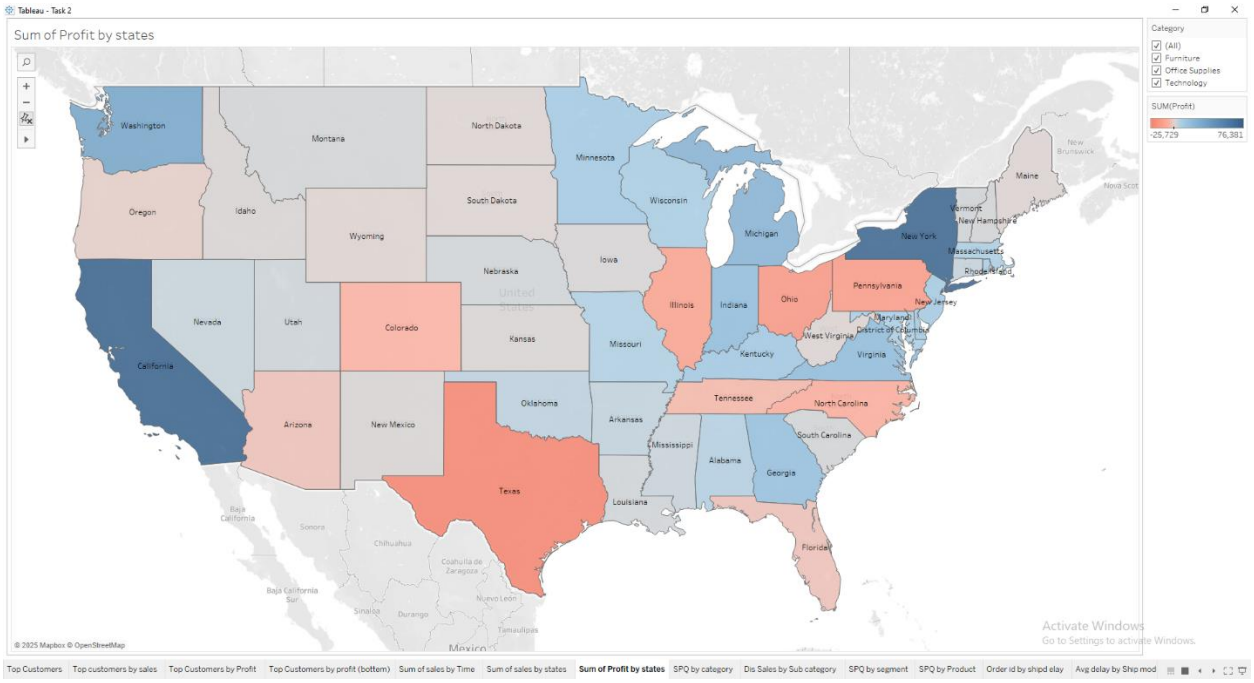
- The sale has increased, when year increases and the sale of each year has increased when the time reach to December. But each year we can see drop in January, May, June, July and August months. And also drop in October. The profit also gets high in September, October, November, and December. I think this is because it is the Christmas season.

Sum of sales by States



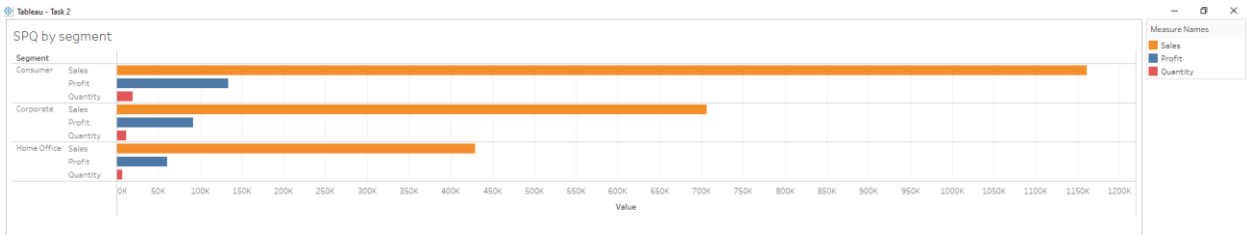
- This is map visualization for Sum of sales by states. High amount of sales in California it's $ 457 688, then New York it's $ 310 876. Texas, Washington, Pennsylvania, and Florida state's sales were decreasing respectively.

Sum of Profit by States



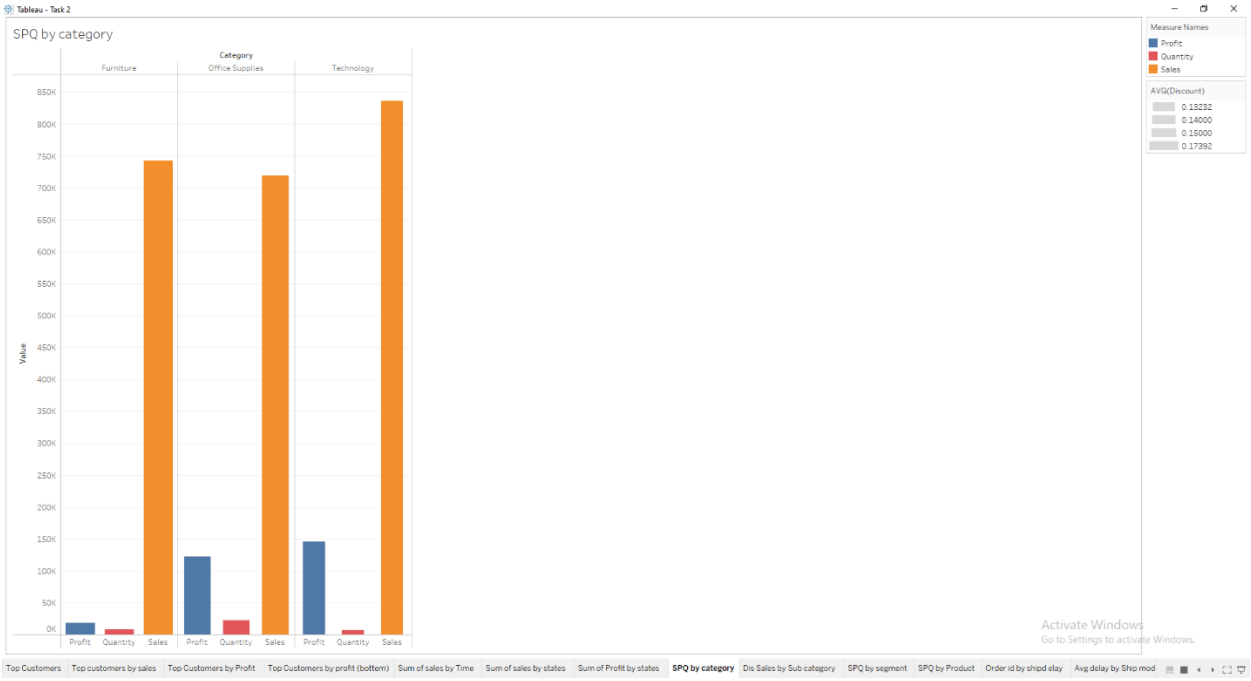
- Above visualization shows the sum of profit by states. According this graph, California, New York, and Washington has high sale and high profit, but Texas, Pennsylvania, and Florida have high sale but loss. The highest profit in California and the highest loss in Texas.

Sales, Profit, Quantity with respect to Segment



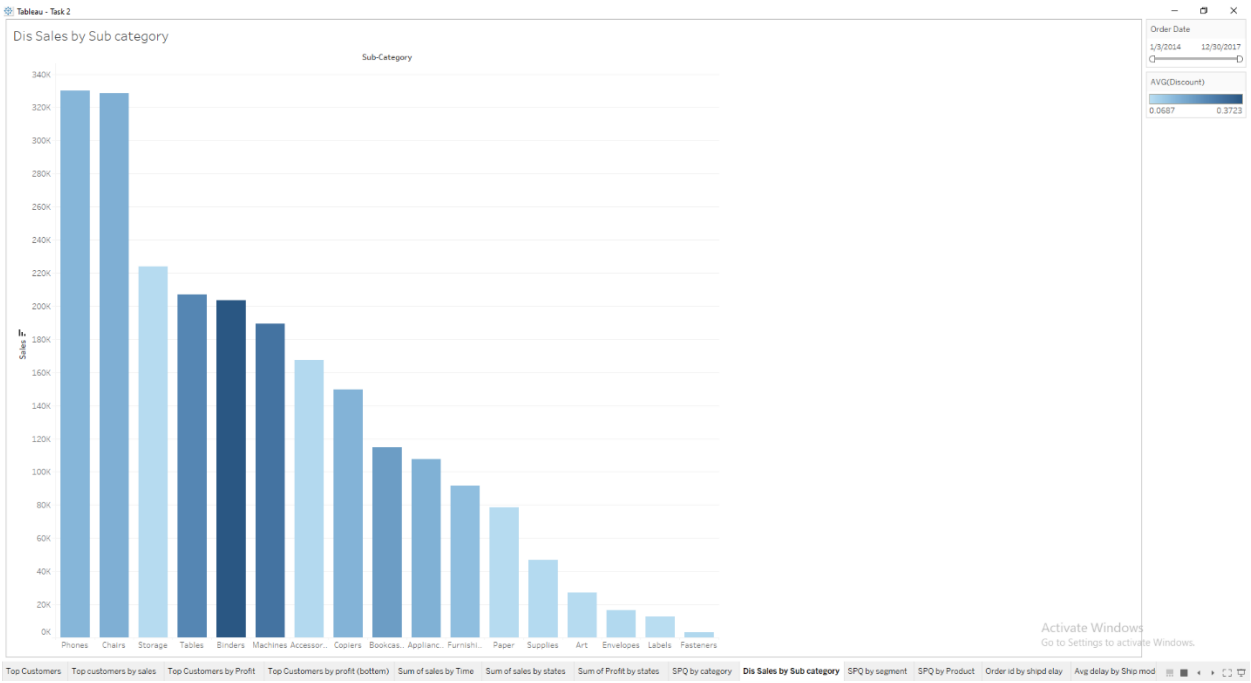
- The highest Sale, highest profit, and highest quantity is in Consumer segment. Home office segment has lowest on those values. But we can see high difference with consumer sales and consumer profit.

Sales, Profit, and Quantity by Category



- This graph represents the sum of sales, Profit, and Quantity. The size of bar represents the average discount for each category. There are 3 categories. They are furniture, technology, and office supplies. The high sales, and the high profit is in technology category and average discount of this category is lower than other categories. The highest average discount has given for furniture category. The store has sold high number of quantities in office supplies category.

Sales by Sub Category



- There are 17 categories. The bar height of the graph represents the sum of sales and the color scheme represents the average discount for each sub category. Light color for low average. Highest sale from Phones and lowest sale from Fasteners. The highest discount for Binders.