Superstore Sales Analysis

# Sales Trends

**Sales Trends over time:**  Analysis the sales amount over different periods(e.g months, quarters ,years) tp identify any growth trends, or fluctuations in sales.

# Shipping

**Ship mode**: Compare the shipping mode to determine the which shipping method is commonly used.

**Geographical Analysis**: Explore sales data based on country, city state and region to identify area with high and low sales performance. Identify numbers of customers per states and city.

 **Impact of Delivery Times on Customer Satisfaction**:

* Calculated delivery times and analyzed their relationship with sales.
* Used scatter plots and correlation analysis to understand how delivery times affect sales, which can be an indirect measure of customer satisfaction.
* Visualized the relationship between delivery times and average sales to identify trends.

# Product and Product Category

**Product Category analysis:** Investigate the sales performance of different product category.

**Sub-category insight:** Analyze sales based on sub-categories to identify the top-selling and least selling products.

**Product Performance:** Analyze the popularity of different products based on their sales amount and determine if any products need to be promoted or discontinued.

# Customer

**Customer segmentation:** Group Customers based on segment and analyze their buying behavior to understand which segments contribute the most to overall sales.

**Customers Loyalty:** Examine the repeat purchase behavior of customer by calculating the frequency of orders and identifying loyal customers.

**Sales by Customers:** analyze the customers in terms total worth of goods they have bought from the store.

 **Profit Margins Across Products and Categories**:

* We calculated and visualized average profit margins for products and categories.
* This helps identify which products and categories are the most and least profitable.

 **Impact of Discounts on Profit**:

* We used scatter plots and correlation analysis to understand how discounts affect profit.
* Analyzed the impact of discounts on profit margins and visualized the results.

 **Additional Insights**:

* Distribution of profit values and how profit varies across region