

## Exploratory Data Analysis (EDA) and Business Insights:

1. **Customer Distribution by Region:** The majority of customers are concentrated in specific regions. For example, Europe and Asia have significantly more customers than other regions, indicating potential opportunities to target customers in less represented areas.
2. **Product Category Popularity:** Certain product categories, such as Electronics, dominate sales, suggesting a higher demand in these categories. This can help businesses focus on expanding their product range in popular categories.
3. **Price Distribution:** The price distribution of products shows that most products are priced within a certain range, with a few high-value items. This insight suggests a focus on mid-range priced products could appeal to a broader customer base.
4. **Transaction Volume by Region:** Regions with higher customer density, such as Europe, also show higher transaction volumes. This indicates a need for tailored marketing and promotions in high-volume regions.
5. **Price and Quantity Relationship:** There is a correlation between the price of a product and the total value of transactions, suggesting that higher-priced products lead to higher revenue per transaction. Businesses could consider offering high-value items to boost sales.