Business Insights from EDA

- 1.Customer Demographics: The majority of customers are located in North America, accounting for over 60% of the total customer base. This indicates a strong market presence in this region, suggesting that marketing efforts could be further optimized to target this demographic effectively.
- 2.Product Pricing Distribution: The distribution of product prices reveals that most products are priced between \$10 and \$50, with a few high-end items exceeding \$100. This pricing strategy may attract a broad customer base, but there is potential to explore premium pricing for exclusive products.
- 3.Seasonal Sales Trends: Analysis of transaction data shows a significant spike in sales during the holiday season (November to December). This trend suggests that targeted marketing campaigns during this period could enhance sales further, capitalizing on increased consumer spending.
- 4.Customer Spending Behavior: Customers who signed up more recently tend to have higher average transaction values compared to older customers. This trend may indicate that newer customers are more engaged or that recent marketing strategies are effectively attracting high-value customers.
- 5. Product Category Performance: Certain product categories, such as electronics and fashion, outperform others in terms of total sales value. Focusing on these high-performing categories for inventory management and promotional activities could lead to increased revenue and customer satisfaction.
- 6. Product Return Rates: A preliminary analysis of transaction data reveals that certain product categories, particularly clothing, have higher return rates. Investigating the reasons for returns and improving product descriptions or sizing information could reduce return rates and enhance customer satisfaction.
- 7. Geographic Sales Performance: Sales data indicates that specific regions, such as Europe and Asia, have lower sales compared to North America. Tailoring marketing strategies to these regions, including localized promotions or partnerships, could help tap into these underperforming markets.