

Business Insights from EDA of eCommerce Transactions Dataset

1. Product Demand:

- Products with higher prices generally have fewer transactions, suggesting that customers prefer more affordable options. Retailers can consider offering discounts or promotional pricing to boost sales of premium products.

2. Region-Based Sales:

- The customer distribution by region reveals that the majority of customers are from **North America**, with significant contributions from Europe and Asia. This insight can guide region-specific marketing strategies and product offerings.

3. Pricing and Sales Correlation:

- There is a weak negative correlation between product price and the number of units sold, indicating that cheaper products tend to sell more frequently. This suggests that low-priced products are more popular among customers.

4. Customer Retention:

- Newer customers (those who signed up recently) show a higher total transaction value, which implies that the customer base is growing and customers are making frequent purchases. Businesses can focus on retaining these newer customers by offering loyalty rewards or personalized offers.

5. Seasonal Trends:

- A noticeable peak in sales occurred during the holiday season, particularly from November to December. This suggests that sales are driven by seasonal factors, and targeted campaigns during these months could further boost sales.