

Business Insights from EDA

1. **Customer Sign-Up Trends:**

The yearly distribution of customer signups reveals growth patterns over time. Spikes in signup numbers suggest effective marketing campaigns or new service launches. For instance, a notable increase in signups during specific years can inform future marketing efforts.

2. **Regional Customer Base:**

The regional analysis of customers highlights geographic areas with the highest customer density. Regions with lower customer counts represent untapped markets, ideal for targeted campaigns to drive customer acquisition.

3. **Top Revenue-Generating Categories:**

Sales analysis by product categories shows which categories contribute the most to revenue. This helps in prioritizing inventory, promotions, and product launches for high-performing categories.

4. **High-Value Customers:**

Transaction frequency by customer indicates a small percentage of customers contribute to a large number of transactions. These high-value customers should be targeted with loyalty programs or personalized offers to enhance retention.

5. **Seasonal Revenue Trends:**

Revenue trends over time show seasonal fluctuations or consistent growth. Peaks in revenue during specific months could align with holidays or promotions, offering opportunities for replicating successful strategies.

6. **Regional Revenue Contributions:**

The revenue analysis by region highlights the most profitable areas. Regions with lower revenue contributions can be targeted with specific campaigns or adjusted strategies to boost overall profitability.