EDA Report

This report summarizes key insights derived from exploratory data analysis (EDA) on customer, product, and transaction datasets. The analysis aims to uncover patterns in customer behavior, product performance, and seasonal trends.

1. Seasonal Trends (Peak Sales Periods)

- Monthly revenue trends revealed seasonal peaks in sales.

- These insights can guide inventory planning and marketing efforts.

2. Customer Growth by Region

- Regional signup trends indicate varied growth rates across regions.

- These trends help prioritize regions for targeted campaigns.

3. Top Revenue-Generating Products

- A small set of products contribute disproportionately to total revenue.

- Insights can inform inventory management and promotional strategies.

4. High-Value Customers (Pareto Analysis)

- The Pareto Principle holds: 80% of revenue is generated by 20% of customers.

- Identifying high-value customers is crucial for retention strategies.

5. Product Pricing Impact

- Mid-range priced products drive the highest sales volumes.

- Pricing strategies can focus on these ranges for maximum impact.

Conclusion

The analysis provides actionable insights for business optimization in areas such as marketing, inventory management, and pricing strategies. Leveraging these findings can lead to improved customer engagement and revenue growth.