EDA Report - Credit Card Customer Dataset

Credit Card Customer Dataset - EDA Report

1. Introduction

Exploratory Data Analysis (EDA) on credit card customer dataset to extract trends, relationships, and anomalies.

2. Data Overview

- Dataset consists of financial behavior variables.

- Missing values were dropped.

3. Histograms

Observation:

- Right-skewed distributions.

- Majority customers have low balances and purchases; few extreme users exist.

4. Boxplots

Observation:

- Significant outliers present in BALANCE, PURCHASES, CASH_ADVANCE, CREDIT_LIMIT.

- High variance across several features.

5. Scatterplots

5.1 BALANCE vs CREDIT_LIMIT

- Positive linear relationship observed.

- Many customers maintain low balances even with high limits.

5.2 PURCHASES vs PAYMENTS

- Positive correlation.

- Some outlier customers have very high payments.

6. Identified Relationships and Trends

- Strong positive relation between BALANCE and CREDIT_LIMIT.

- Strong positive relation between PURCHASES and PAYMENTS.

- Right-skewness dominant across features.

7. Conclusion

- Significant outliers need to be handled.

- Data normalization or transformation is recommended.

- Financial behavior segmentation is a strong future application.