Business Insights Report (Lookalike Model)

Introduction

The Lookalike Model leverages customer, product, and transaction data to identify and recommend customers with similar behavior or preferences. This approach helps in targeted marketing, personalized recommendations, and enhancing customer satisfaction.

Key Findings from Lookalike Model

1. **Data Preprocessing:**

   ➢ The model standardizes features like purchase frequency, transaction value, and product preferences using techniques such as StandardScaler.

   ➢ Data from Customers.csv, Products.csv, and Transactions.csv is merged to create a comprehensive dataset for analysis.

2. **Similarity Computation:**

   ➢ **Cosine Similarity:**

      1. The model calculates similarity scores between customers based on their purchasing patterns and product preferences.

      2. High similarity scores (e.g., >0.8) indicate strong behavioral matches, useful for identifying lookalike customers.

   ➢ **Feature Importance:**

      1. Features like recency, frequency, and monetary value are prioritized to ensure accurate similarity measurements.

3. **Model Performance:**

   ➢ **Accuracy:**

      1. The model demonstrates high accuracy in identifying customers with similar profiles, validated through test cases and cross-checks.

   ➢ **Recommendations:**

      1. Personalized product recommendations based on lookalike profiles enhance customer engagement and retention.