

## Objective

The goal was to develop a **Lookalike Model** that recommends similar customers based on profile and transaction data. Recommendations were generated using a similarity score.

## Model Development Steps

## 1. Feature Engineering

- Combined data from Customers.csv and Transactions.csv to create customer profiles.
- Key features: Average transaction value, total quantity purchased, and favourite product category.

## 2. Cosine Similarity

- Implemented the **Cosine Similarity** algorithm to compare customer profiles.
- Customers with similar profiles (e.g., frequent purchases or similar spending patterns) were identified as lookalikes.

### 3. Output

The Lookalike.csv contains a mapping for customers (C0001 to C0020) with their top 3 lookalikes and similarity scores.

## Key Findings

- Customers with similar spending patterns and product preferences are identified accurately.
- Example: Customer **C0001** was closely matched with **C0151**, **C0150**, and **C0012** based on average transaction value and category overlap.

[illegible]