

Customer Segmentation

Number of Customers

200

Gender

All

Age

All

Annual Income

All

Spending Score

All

Clusters

Cluster 0

Cluster 1

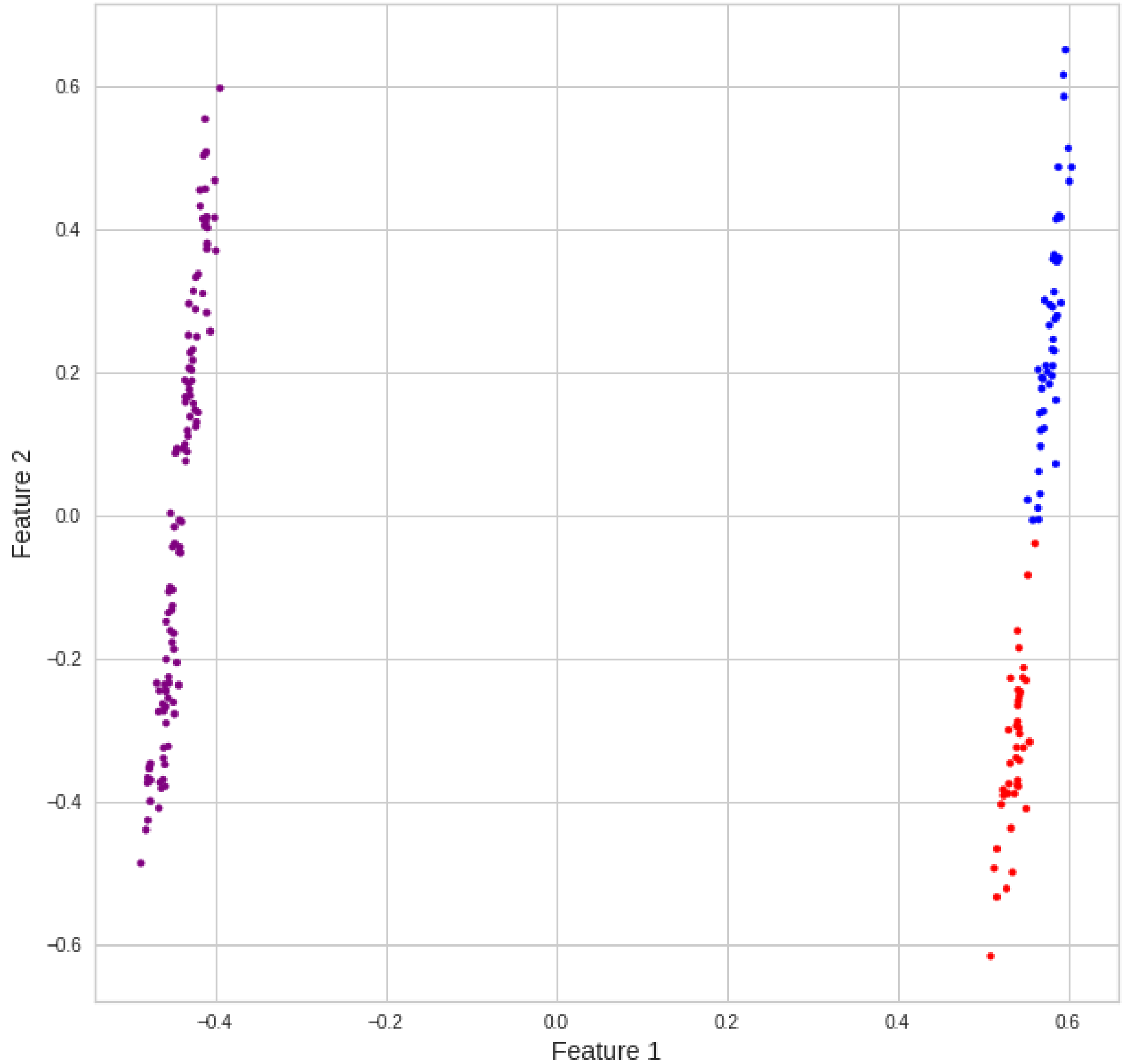
Cluster 2

Problem Statement

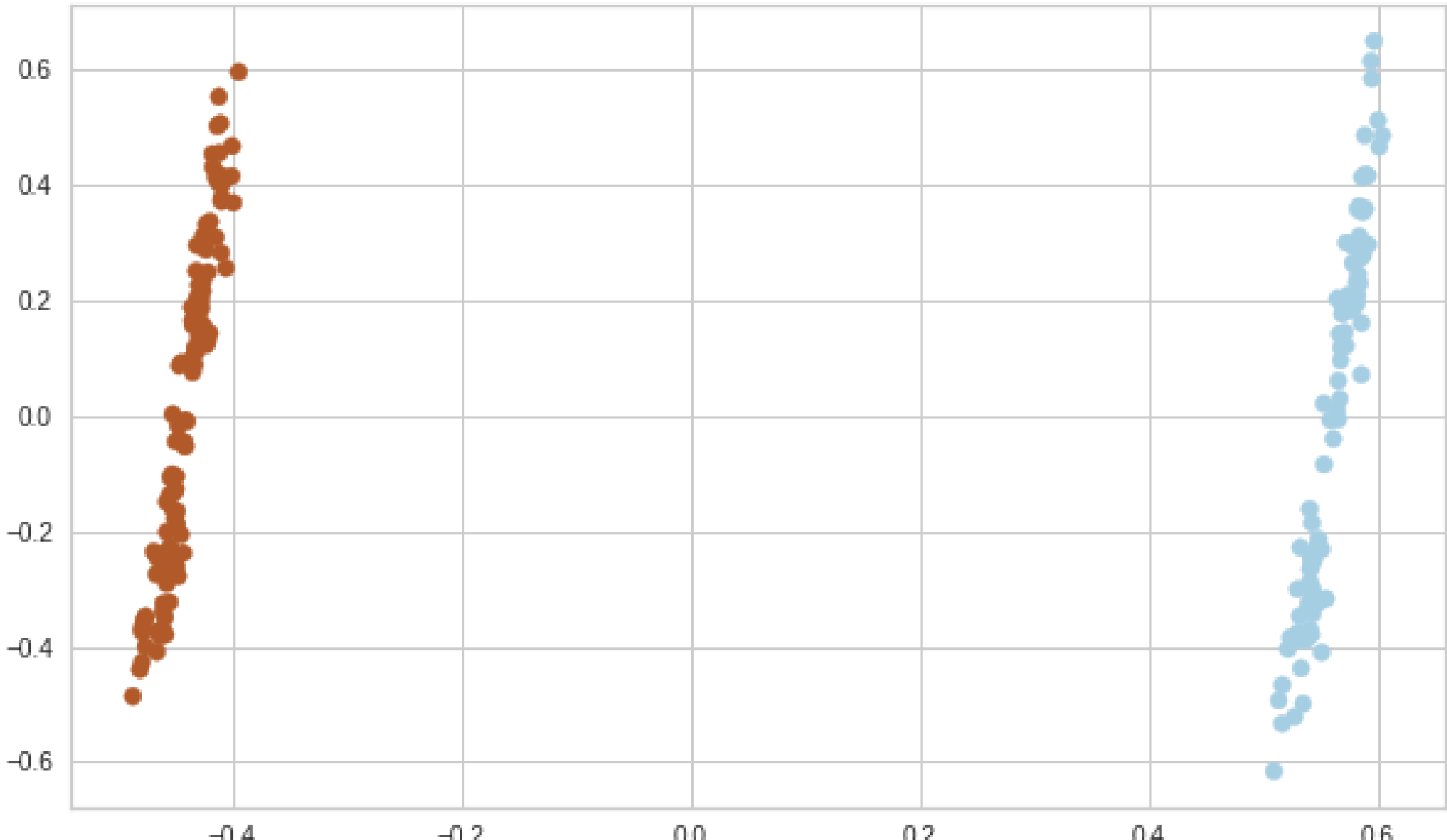
A company wants to understand her customers so as to target campaigns adequately to make profit.
Data: The data set given contains the anonymized details of 200 customers highlighting their age, sex gender, annual income and spending score.
Task: Cluster the customers and find the characteristics of the customers. Provide insights on the targets to ensure the profitability of the business.

Results from Cluster Analysis

K-Means Clustering



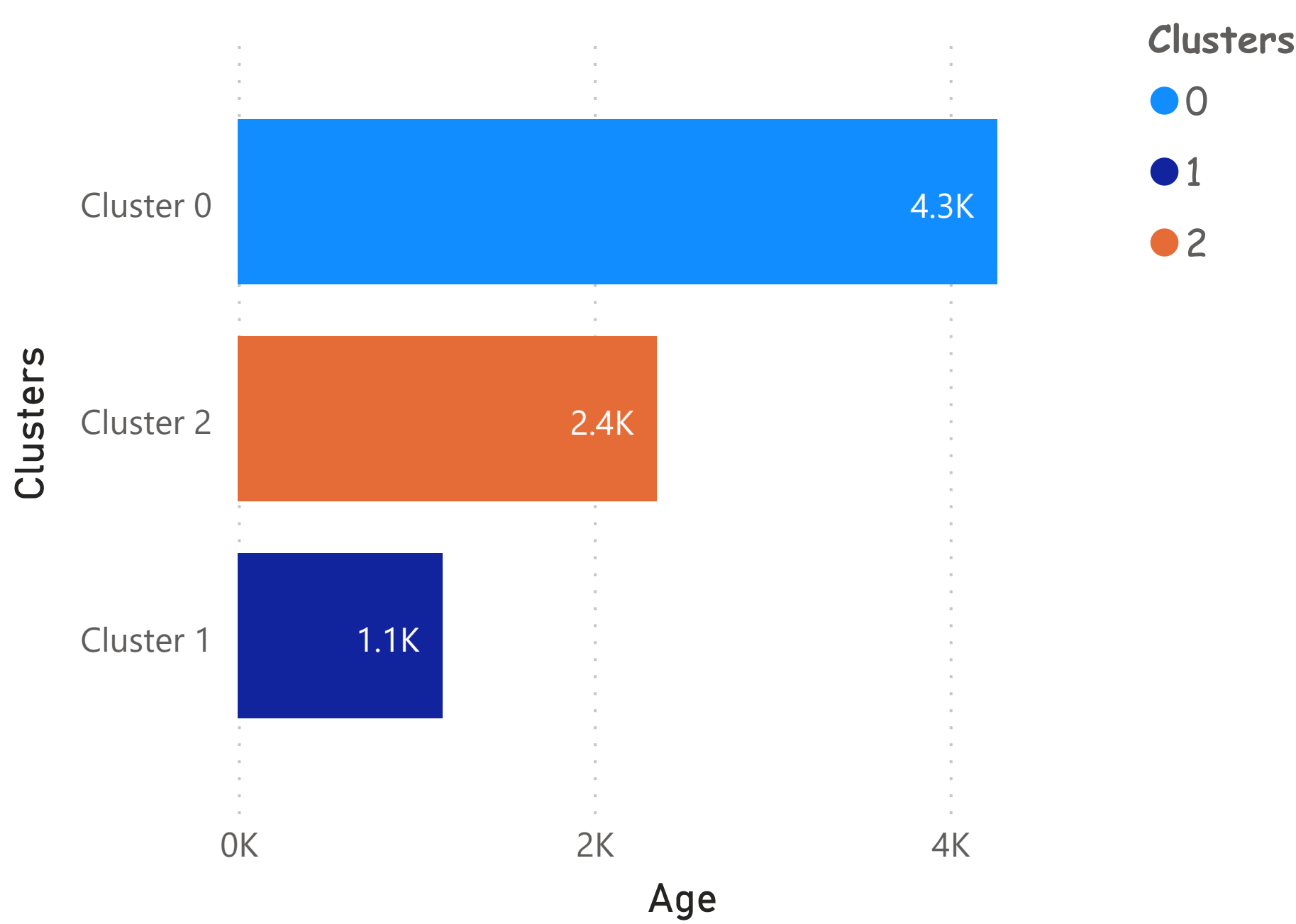
DBSCAN Clustering



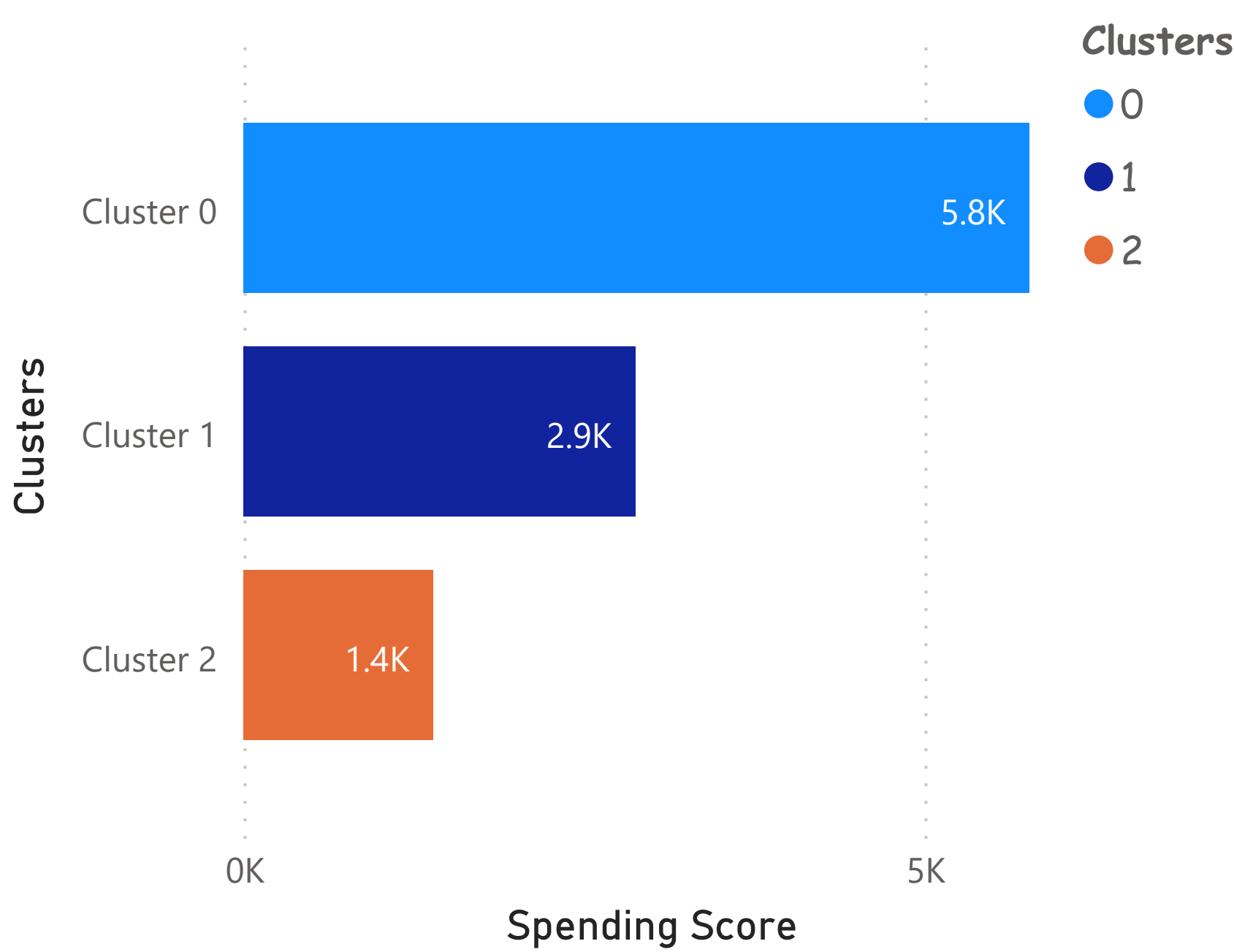
The silhouette score returned by K-Means was 0.688 while that of DBSCAN was 0.519, indicating that the clusters are better in K-Means.

Summary of Customers

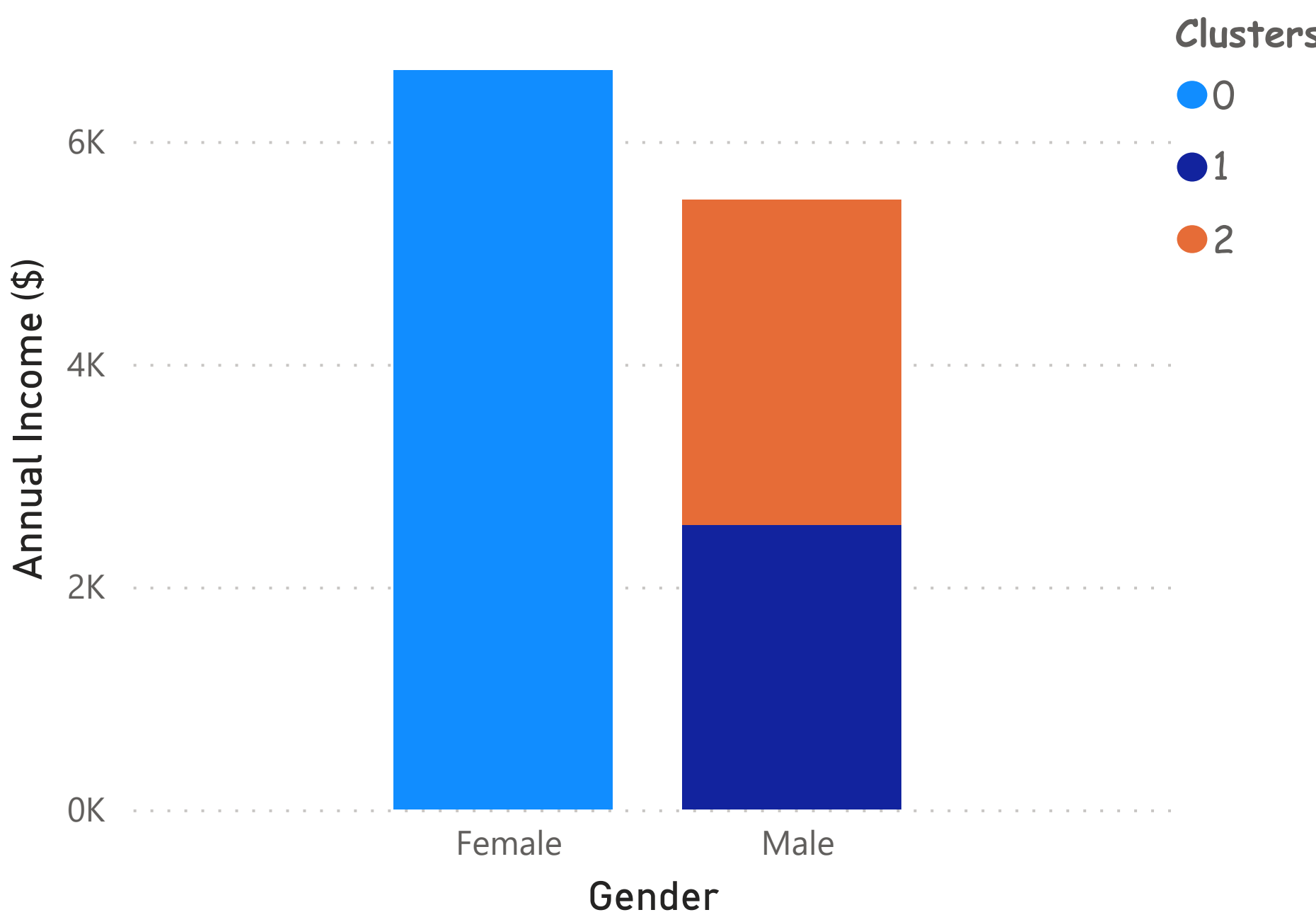
Clusters by Age



Clusters by Spending Score



Clusters of Annual Income by Gender



Cluster 0

They are female only
They spend the highest amount of money.
The age range from 30 - 40 earn more money.

Cluster 1

The men in cluster 1 spend the least even though they have roughly the same income as cluster 2

Cluster 2

The men in cluster spend more money than cluster 1.

Insights

We see that the male and female from 30 to 40 are the people that earn the most money.
So, we can focus on targeting this population.