

Customer Segmentation

Shuangxu Li

3/19/2019

Problem Statement

Marketing would like to increase email campaign engagement by segmenting the customer-base using their buying habits.

Solution Summary

The data science team has identified 4 customer segments. The 4 customer segments were given descriptions based on the customer's top product purchases.

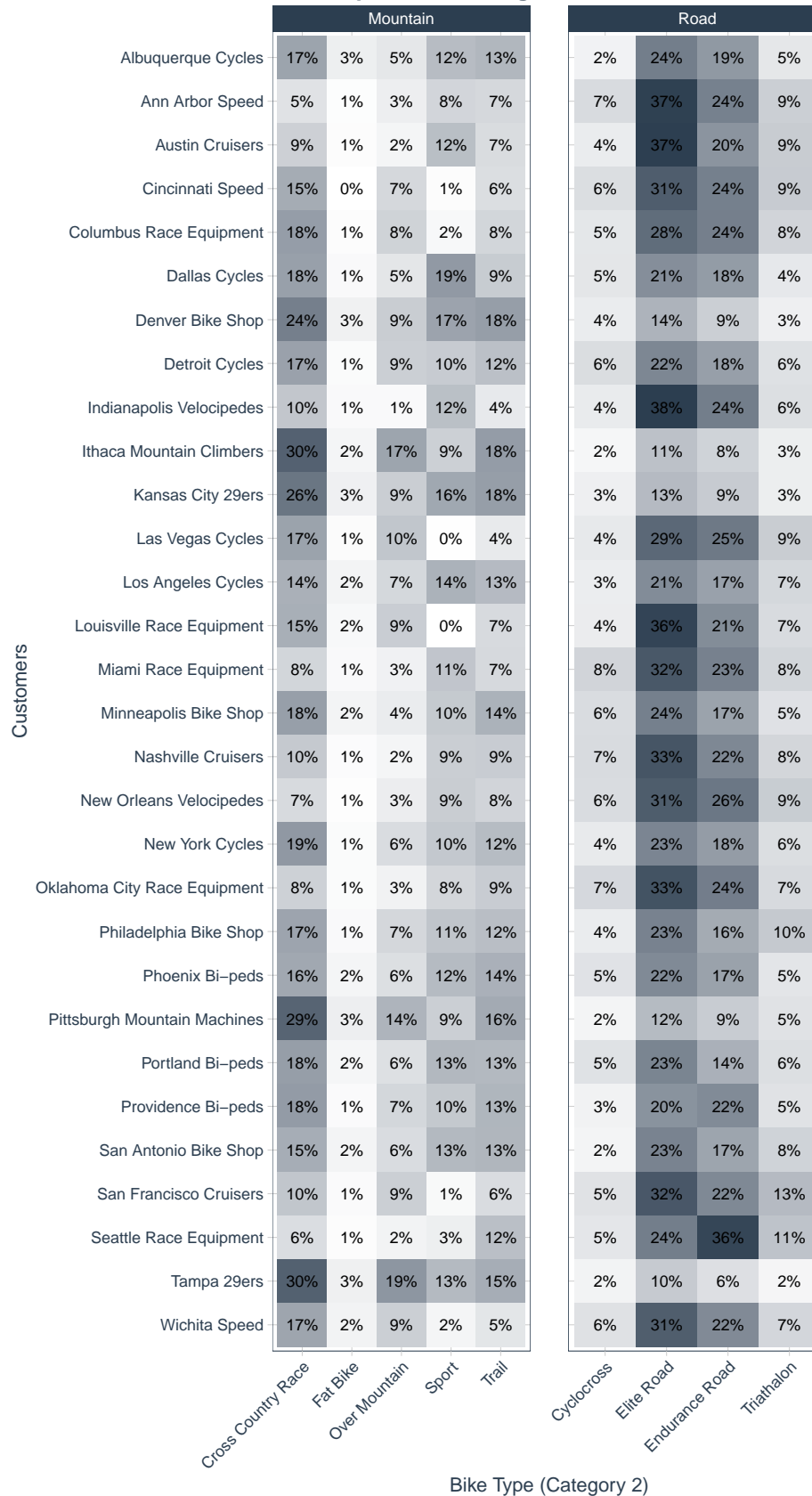
1. **Segment 1 Preferences:** Road Bikes, Below \$3200 (Economical Models)
2. **Segment 2 Preferences:** Mountain Bikes, Above \$3200 (Premium Models)
3. **Segment 3 Preferences:** Road Bikes, Above \$3200 (Premium Models)
4. **Segment 4 Preferences:** Both Road and Mountain, Below \$3200 (Economical Models)

Customer Preferences

Heat Map

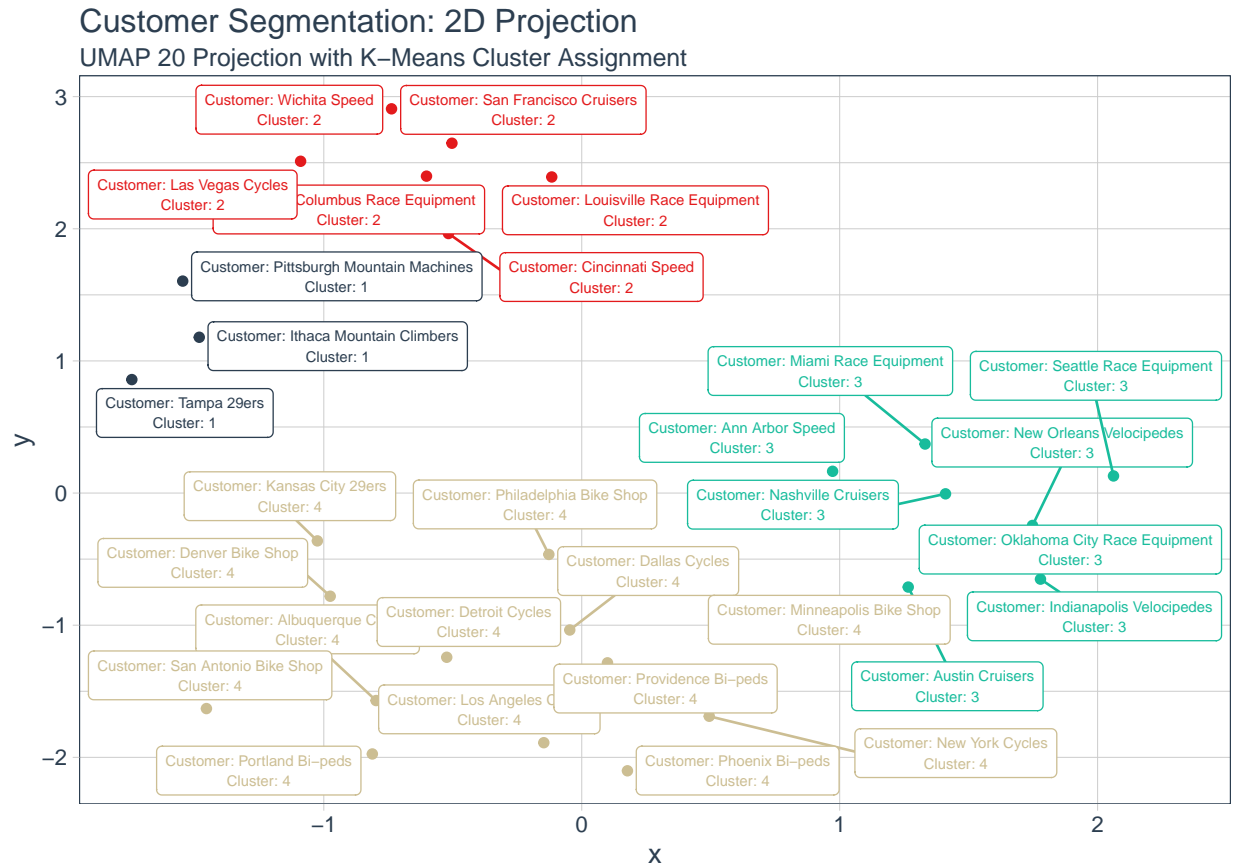
Our customer-base consists of 30 bike shops. Several customers have purchasing preferences for Road or Mountain Bikes based on the proportion of bikes purchased by category_1 and category_2.

Heatmap of Purchasing Habits



Customer Segmentation

This is a 2D Projection based on customer similarity that exposes 4 clusters, which are key segments in the customer base.



Customer Preferences By Segment

The 4 customer segments were given descriptions based on the customer's top product purchases.

1. **Segment 1 Preferences:** Road Bikes, Below \$3200 (Economical Models)
2. **Segment 2 Preferences:** Mountain Bikes, Above \$3200 (Premium Models)
3. **Segment 3 Preferences:** Road Bikes, Above \$3200 (Premium Models)
4. **Segment 4 Preferences:** Both Road and Mountain, Below \$3200 (Economical Models)

Top 5 Bike Models by Customer and Cluster

