# Customer Segmentation

## KR/Business Science

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#### **Problem Statement**

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

### **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.

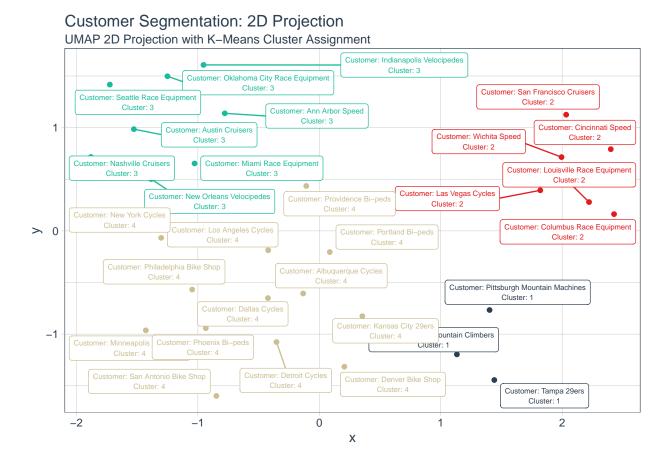
# **Heatmap of Purchasing Habits**

| Albuquerque Cycles 16,8% 3.1% 4.5% 12.2% 13.3% 2.4% 24.1% 18.9% 4.5% Ann Artor Speed 5.3% 0.7% 3.2% 7.6% 7.1% 6.6% 37.0% 23.6% 8.8% Cincinnati Speed 16,5% 0.8% 2.0% 11.8% 6.5% 3.7% 27.0% 3.7% 19.9% 9.3% Cincinnati Speed 16,5% 0.8% 2.0% 11.8% 6.5% 3.7% 23.6% 8.8% 1.5% Columbus Race Equipment 18.0% 0.8% 8.1% 1.5% 7.6% 4.6% 27.7% 23.9% 7.9% Dallas Cycles 17.5% 1.3% 4.7% 18.8% 9.4% 4.7% 20.9% 18.4% 4.3% 14.0% 18.9% 18.9% |          |                              | Mountain |         |       |       |       |     | Road     |         |        |       |
|--|----------|------------------------------|----------|---------|-------|-------|-------|-----|----------|---------|--------|-------|
| Austin Cruisers 8.5% 0.8% 2.0% 11.8% 6.5% 6.5% 6.1% 30.9% 9.3% Cincinnati Speed 15.3% 0.3% 7.2% 0.8% 6.1% 6.1% 30.9% 23.8% 9.5% Columbus Race Equipment 18.0% 0.8% 8.1% 1.5% 7.6% 4.6% 27.7% 23.9% 7.9% Dallas Cycles 17.5% 1.3% 4.7% 18.8% 9.4% 4.7% 20.9% 18.4% 4.3% Deriver Bike Shop 23.9% 2.7% 9.2% 16.9% 17.9% 3.7% 14.0% 8.8% 3.1% Deriver Detroit Cycles 17.3% 1.0% 8.7% 9.5% 11.5% 6.3% 22.4% 17.7% 5.6% Indianapolis Velocipedes 10.3% 1.3% 1.3% 11.6% 4.1% 3.8% 37.6% 24.1% 6.0% Ithaca Mountain Climbers 90.0% 2.0% 16.6% 8.6% 18.2% 1.9% 11.3% 8.1% 3.3% Kansas City 29ers 25.8% 2.9% 8.9% 16.1% 17.9% 3.1% 12.6% 9.4% 3.3% Las Vegas Cycles 17.0% 1.0% 10.4% 0.5% 4.0% 4.2% 28.7% 25.2% 9.1% Louisville Race Equipment 14.7% 1.5% 9.1% 0.3% 6.8% 3.5% 32.2% 21.3% 6.6% Nashville Cruisers 9.8% 0.9% 2.0% 9.0% 9.2% 6.6% 32.7% 12.3% 7.5% New Orleans Velocipedes 6.8% 0.7% 3.4% 9.1% 7.8% 6.4% 33.0% 22.3% 7.5% 9.2% Oklahoma City Race Equipment 8.4% 1.0% 2.6% 7.5% 9.3% 7.8% 9.2% 18.9% 19.0% 10.0% 6.4% 10.1% 12.3% 4.0% 22.7% 18.3% 6.2% Pholenix Bi-peds 16.0% 2.0% 6.0% 12.5% 14.4% 5.3% 21.8% 17.2% 4.8% Phoenix Bi-peds 16.0% 2.0% 6.0% 12.5% 14.4% 5.3% 21.8% 17.2% 4.8% Providence Bi-peds 15.5% 1.9% 5.7% 13.0% 12.9% 5.3% 22.9% 23.1% 5.3% 24.9% 5.3% 29.9% 5.3% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 5.5% 8.1% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 15.5% 8.1% San Francisco Cruisers 10.4% 1.1% 8.8% 1.3% 6.4% 5.3% 32.1% 12.5% 5.3% 21.6% |          | Albuquerque Cycles           | 16.8%    | 3.1%    | 4.5%  | 12.2% | 13.3% |     | 2.4%     | 24.1%   | 18.9%  | 4.5%  |
| Cincinnati Speed   15.3%   0.3%   7.2%   0.8%   6.1%     6.1%   30.9%   23.8%   9.5%   Columbus Race Equipment   18.0%   0.8%   8.1%   1.5%   7.6%   4.6%   27.7%   23.9%   7.9%     27.0%   23.9%   7.9%  | Customer | Ann Arbor Speed              | 5.3%     | 0.7%    | 3.2%  | 7.6%  | 7.1%  |     | 6.6%     | 37.0%   | 23.6%  | 8.8%  |
| Delias Cycles  |          | Austin Cruisers              | 8.5%     | 0.8%    | 2.0%  | 11.8% | 6.5%  |     | 3.7%     | 37.4%   | 19.9%  | 9.3%  |
| Dallas Cycles 17.5% 1.3% 4.7% 18.8% 9.4% 4.7% 20.9% 18.4% 4.3% Denver Bike Shop 23.9% 2.7% 9.2% 16.9% 17.9% 3.7% 14.0% 8.8% 3.1% Detroit Cycles 17.3% 1.0% 8.7% 9.5% 11.5% 6.3% 22.4% 17.7% 5.6% Indianapolis Velocipedes 10.3% 1.3% 1.3% 11.6% 4.1% 3.8% 37.6% 24.1% 6.0% Ithaca Mountain Climbers 30.0% 2.0% 16.6% 8.6% 18.2% 1.9% 11.3% 8.1% 3.3% Kansas City 29ers 25.8% 2.9% 8.9% 16.1% 17.9% 3.1% 12.6% 9.4% 3.3% Las Vegas Cycles 17.0% 1.0% 10.4% 0.5% 4.0% 4.2% 28.7% 25.2% 9.1% Los Angeles Cycles 14.5% 2.2% 7.2% 14.2% 12.6% 3.5% 21.4% 17.3% 7.2% Louisville Race Equipment 7.6% 1.3% 2.7% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% 1.3% 1.42% 12.6% 1.3% 3.5% 21.4% 17.3% 7.2% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5% 1.5  |          | Cincinnati Speed             | 15.3%    | 0.3%    | 7.2%  | 0.8%  | 6.1%  |     | 6.1%     | 30.9%   | 23.8%  | 9.5%  |
| Denver Bike Shop  23.9% 2.7% 9.2% 16.9% 17.9%  Detroit Cycles 17.3% 1.0% 8.7% 9.5% 11.5%  Indianapolis Velocipedes 10.3% 1.3% 1.3% 11.8% 4.1%  Ithaca Mountain Climbers 30.0% 2.0% 16.6% 8.6% 18.2%  Kansas City 29ers 25.8% 2.9% 8.9% 16.1% 17.9%  Las Vegas Cycles 17.0% 1.0% 10.4% 0.5% 4.0%  Los Angeles Cycles 14.5% 2.2% 7.2% 14.2% 12.6%  Louisville Race Equipment 14.7% 1.5% 9.1% 0.3% 6.8% 3.5% 36.2% 21.3% 6.6%  Miami Race Equipment 7.6% 1.3% 2.7% 10.5% 7.0%  Nashville Cruisers 9.8% 0.9% 2.0% 9.0% 9.2% 6.6% 32.7% 17.0% 5.5%  New Orleans Velocipedes 6.8% 0.7% 3.4% 9.1% 7.8% 6.4% 31.0% 22.7% 18.3% 6.2%  Oklahoma City Race Equipment 8.4% 1.0% 2.6% 7.5% 9.3% 7.1% 33.1% 24.2% 6.8%  Philadelphia Bike Shop 16.7% 1.2% 7.3% 10.6% 11.8% 3.7% 23.3% 15.5% 9.8%  Phoenix Bi-peds 16.0% 2.0% 6.0% 12.5% 14.4% 5.3% 21.8% 17.2% 4.8%  Portland Bi-peds 16.0% 2.0% 6.0% 12.5% 14.4% 5.3% 21.8% 17.2% 4.8%  Providence Bi-peds 18.5% 1.1% 7.4% 10.0% 13.5% 2.6% 20.1% 21.9% 5.5% 5.9%  San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 2.31% 16.7% 8.1% 5.9%  San Francisco Cruisers 10.4% 1.1% 8.8% 1.3% 6.4% 5.3% 32.1% 21.9% 12.9% 5.5% 30.8% 21.9% 1.9% 5.5% 10.9%  Vichita Speed 16.6% 2.4% 8.8% 1.3% 6.4% 5.5% 30.8% 21.7% 5.5% 10.9%  Wilchita Speed 16.6% 2.4% 8.8% 15.6% 5.5% 30.8% 21.7% 5.5% 5.5% 30.8% 21.7% 5.5%  |          | Columbus Race Equipment      | 18.0%    | 0.8%    | 8.1%  | 1.5%  | 7.6%  |     | 4.6%     | 27.7%   | 23.9%  | 7.9%  |
| Detroit Cycles   17.3%   1.0%   8.7%   9.5%   11.5%   6.3%   22.4%   17.7%   5.6%   1.01   |          | Dallas Cycles -              | 17.5%    | 1.3%    | 4.7%  | 18.8% | 9.4%  |     | 4.7%     | 20.9%   | 18.4%  | 4.3%  |
| Indianapolis Velocipedes 10.3% 1.3% 11.6% 4.1% 3.8% 37.6% 24.1% 6.0% Ithaca Mountain Climbers 30.0% 2.0% 16.6% 8.6% 18.2% 1.9% 11.3% 8.1% 3.3% - Kansas City 29ers 25.8% 2.9% 8.9% 16.1% 17.9% 3.1% 12.6% 9.4% 3.3% - Las Vegas Cycles 17.0% 1.0% 10.4% 0.5% 4.0% 4.2% 28.7% 25.2% 9.1% Louisville Race Equipment 14.7% 1.5% 9.1% 0.3% 6.8% 3.5% 36.2% 21.3% 6.6% 14.2% 12.6% 14.2% 12.6% 14.5% 2.2% 7.2% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% 10.5% 7.0% 10.5% 7.0% 10.5% 7.0% 10.5% 7.0% 10.5% 7.0% 10.5% 7.0% 10.5% 7.0% 10.5% 10.5% 7.0% 10.5% 7.0% 10.5% 10 |          | Denver Bike Shop             | 23.9%    | 2.7%    | 9.2%  | 16.9% | 17.9% |     | 3.7%     | 14.0%   | 8.8%   | 3.1%  |
| Ithaca Mountain Climbers   30.0%   2.0%   16.6%   8.6%   18.2%   1.9%   11.3%   8.1%   3.3%  |          | Detroit Cycles               | 17.3%    | 1.0%    | 8.7%  | 9.5%  | 11.5% |     | 6.3%     | 22.4%   | 17.7%  | 5.6%  |
| Las Vegas Cycles   17.0%   1.0%   10.4%   0.5%   4.0%   4.2%   28.7%   25.2%   9.1%   14.5%   2.2%   7.2%   14.2%   12.6%   3.5%   36.2%   21.3%   6.6%   32.7%   22.3%   7.5%   3.5%   36.2%   21.3%   6.6%   32.7%   22.3%   7.5%   3.2%   32.7%   32.3%   32.5%   7.6%   3.2%   32.7%   32.3%   32.5%   7.6%   3.2%   32.7%   32.3%   32.5%   7.6%   32.7%   32.3%   32.5%   7.6%   32.7%   32.3%   32.5%   32.   |          | Indianapolis Velocipedes -   | 10.3%    | 1.3%    | 1.3%  | 11.6% | 4.1%  |     | 3.8%     | 37.6%   | 24.1%  | 6.0%  |
| Las Vegas Cycles 17.0% 1.0% 10.4% 0.5% 4.0% 4.2% 28.7% 25.2% 9.1% Los Angeles Cycles 14.5% 2.2% 7.2% 14.2% 12.6% 3.5% 21.4% 17.3% 7.2% Louisville Race Equipment 14.7% 1.5% 9.1% 0.3% 6.8% 3.5% 36.2% 21.3% 6.6% Miami Race Equipment 7.6% 1.3% 2.7% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% Nashville Cruisers 9.8% 0.9% 2.0% 9.0% 9.2% 6.6% 32.7% 17.0% 5.5% New Orleans Velocipedes 6.8% 0.7% 3.4% 9.1% 7.8% 6.4% 31.0% 25.5% 9.2% New York Cycles 19.0% 1.0% 6.4% 10.1% 12.3% 6.4% 31.0% 25.5% 9.2% Philadelphia Bike Shop 16.7% 1.2% 7.3% 10.6% 11.8% 7.1% 33.1% 24.2% 6.8% Philadelphia Bike Shop 16.7% 1.2% 7.3% 10.6% 11.8% 7.3% 23.3% 15.5% 9.8% Phoenix Bi–peds 16.0% 2.0% 6.0% 12.5% 14.4% 5.3% 21.8% 17.2% 4.8% Portland Bi–peds 17.9% 1.9% 5.7% 13.0% 12.9% 5.4% 22.8% 14.4% 5.9% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 16.7% 8.1% Seattle Race Equipment 6.2% 0.8% 2.3% 3.1% 11.7% 4.7% 24.2% 35.9% 10.9% Tampa 29ers 30.1% 2.9% 19.4% 12.6% 15.0% 2.4% 9.7% 5.8% 1.9% Wichita Speed 16.6% 2.4% 8.9% 2.0% 4.7% 5.5% 30.8% 21.7% 7.5% 10.9%   |          | Ithaca Mountain Climbers -   | 30.0%    | 2.0%    | 16.6% | 8.6%  | 18.2% |     | 1.9%     | 11.3%   | 8.1%   | 3.3%  |
| Los Angeles Cycles 14.5% 2.2% 7.2% 14.2% 12.6% 3.5% 21.4% 17.3% 7.2% Louisville Race Equipment 14.7% 1.5% 9.1% 0.3% 6.8% 3.5% 36.2% 21.3% 6.6% Miami Race Equipment 7.6% 1.3% 2.7% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% Almost Partial Race Equipment 7.6% 1.3% 2.7% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% Nashville Cruisers 9.8% 0.9% 2.0% 9.0% 9.2% 6.6% 32.7% 17.0% 5.5% New Orleans Velocipedes 6.8% 0.7% 3.4% 9.1% 7.8% 6.4% 31.0% 25.5% 9.2% New York Cycles 19.0% 1.0% 6.4% 10.1% 12.3% 4.0% 22.7% 18.3% 6.2% Philadelphia Bike Shop 16.7% 1.2% 7.3% 10.6% 11.8% 3.7% 23.3% 15.5% 9.8% Phoenix Bi-peds 16.0% 2.0% 6.0% 12.5% 14.4% 5.3% 21.8% 17.2% 4.8% Pittsburgh Mountain Machines 29.4% 3.2% 13.8% 8.8% 15.6% 2.1% 12.5% 9.3% 5.3% Providence Bi-peds 17.9% 1.9% 5.7% 13.0% 12.9% 5.4% 22.8% 14.4% 5.9% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 16.7% 8.1% San Francisco Cruisers 10.4% 1.1% 8.8% 1.3% 6.4% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1% 21.9% 5.8% 10.9% Tampa 29ers 30.1% 2.9% 19.4% 12.6% 15.0% 5.5% 30.8% 21.7% 7.5% 5.5% 30.8% 21.7 |          | Kansas City 29ers            | 25.8%    | 2.9%    | 8.9%  | 16.1% | 17.9% |     | 3.1%     | 12.6%   | 9.4%   | 3.3%  |
| Louisville Race Equipment   14.7%   1.5%   9.1%   0.3%   6.8%  |          | Las Vegas Cycles             | 17.0%    | 1.0%    | 10.4% | 0.5%  | 4.0%  |     | 4.2%     | 28.7%   | 25.2%  | 9.1%  |
| Miami Race Equipment 7.6% 1.3% 2.7% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% 7.6% 1.3% 2.7% 10.5% 7.0% 7.9% 32.0% 23.5% 7.6% 1.3% 2.7% 14.2% 6.4% 23.7% 17.0% 5.5% 14.2% 16.6% 32.7% 17.0% 5.5% 16.6% 32.7% 17.0% 5.5% 16.6% 32.7% 17.0% 5.5% 16.6% 32.7% 17.0% 5.5% 16.6% 32.7% 17.0% 5.5% 16.6% 32.7% 17.0% 5.5% 16.6% 18.2% 19.0% 1.0% 6.4% 10.1% 12.3% 10.0% 22.7% 18.3% 6.2% 19.0% 1.0% 6.4% 10.1% 12.3% 10.6% 11.8% 11.8% 11.6% 11.8% 10.6% 11.8%  |          | Los Angeles Cycles           | 14.5%    | 2.2%    | 7.2%  | 14.2% | 12.6% |     | 3.5%     | 21.4%   | 17.3%  | 7.2%  |
| Nashville Cruisers   9.8%  0.9%  2.0%  9.0%  9.2%   6.6%  32.7%  22.3%  7.5%   New Orleans Velocipedes   6.8%  0.7%  3.4%  9.1%  7.8%   6.4%  31.0%  25.5%  9.2%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  9.1%  7.8%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  9.1%  7.8%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  10.1%  12.3%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  10.1%  12.3%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.3%  1.5%  1.2%  1.3%  1.5%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.5%  9.3%  1.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%    7.5%  23.3%  1 |          | Louisville Race Equipment    | 14.7%    | 1.5%    | 9.1%  | 0.3%  | 6.8%  |     | 3.5%     | 36.2%   | 21.3%  | 6.6%  |
| Nashville Cruisers   9.8%  0.9%  2.0%  9.0%  9.2%   6.6%  32.7%  22.3%  7.5%   New Orleans Velocipedes   6.8%  0.7%  3.4%  9.1%  7.8%   6.4%  31.0%  25.5%  9.2%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  9.1%  7.8%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  9.1%  7.8%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  10.1%  12.3%   6.4%  31.0%  25.5%  9.2%   6.8%  0.7%  3.4%  10.1%  12.3%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.3%  1.5%  1.2%  1.3%  1.5%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.1%  33.1%  24.2%  6.8%   7.5%  9.8%   7.5%  9.3%  1.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%   7.5%  23.3%  15.5%  9.8%    7.5%  23.3%  1 |          | Miami Race Equipment -       | 7.6%     | 1.3%    | 2.7%  | 10.5% | 7.0%  |     | 7.9%     | 32.0%   | 23.5%  | 7.6%  |
| New Orleans Velocipedes       6.8%       0.7%       3.4%       9.1%       7.8%       6.4%       31.0%       25.5%       9.2%         New York Cycles       19.0%       1.0%       6.4%       10.1%       12.3%       4.0%       22.7%       18.3%       6.2%         Oklahoma City Race Equipment       8.4%       1.0%       2.6%       7.5%       9.3%       7.1%       33.1%       24.2%       6.8%         Philadelphia Bike Shop       16.7%       1.2%       7.3%       10.6%       11.8%       3.7%       23.3%       15.5%       9.8%         Phoenix Bi-peds       16.0%       2.0%       6.0%       12.5%       14.4%       5.3%       21.8%       17.2%       4.8%         Pittsburgh Mountain Machines       29.4%       3.2%       13.8%       8.8%       15.6%       2.1%       12.5%       9.3%       5.3%         Portland Bi-peds       17.9%       1.9%       5.7%       13.0%       12.9%       5.4%       22.8%       14.4%       5.9%         Providence Bi-peds       18.5%       1.1%       7.4%       10.0%       13.5%       2.6%       20.1%       21.6%       5.4%         San Francisco Cruisers       10.4%       1.1%       8.8% <t< td=""><td>Minneapolis Bike Shop</td><td>17.7%</td><td>2.1%</td><td>3.7%</td><td>9.7%</td><td>14.2%</td><td></td><td>6.4%</td><td>23.7%</td><td>17.0%</td><td>5.5%</td></t<>   |          | Minneapolis Bike Shop        | 17.7%    | 2.1%    | 3.7%  | 9.7%  | 14.2% |     | 6.4%     | 23.7%   | 17.0%  | 5.5%  |
| New York Cycles  |          | Nashville Cruisers           | 9.8%     | 0.9%    | 2.0%  | 9.0%  | 9.2%  |     | 6.6%     | 32.7%   | 22.3%  | 7.5%  |
| Oklahoma City Race Equipment   |          | New Orleans Velocipedes      | 6.8%     | 0.7%    | 3.4%  | 9.1%  | 7.8%  |     | 6.4%     | 31.0%   | 25.5%  | 9.2%  |
| Philadelphia Bike Shop   |          | New York Cycles -            | 19.0%    | 1.0%    | 6.4%  | 10.1% | 12.3% |     | 4.0%     | 22.7%   | 18.3%  | 6.2%  |
| Pittsburgh Mountain Machines 29.4% 3.2% 13.8% 8.8% 15.6% 2.1% 12.5% 9.3% 5.3% Portland Bi-peds 17.9% 1.9% 5.7% 13.0% 12.9% 5.4% 22.8% 14.4% 5.9% Providence Bi-peds 18.5% 1.1% 7.4% 10.0% 13.5% 2.6% 20.1% 21.6% 5.4% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 16.7% 8.1% San Francisco Cruisers 10.4% 1.1% 8.8% 1.3% 6.4% 5.3% 32.1% 21.9% 12.6% 5.3% Seattle Race Equipment 6.2% 0.8% 2.3% 3.1% 11.7% 4.7% 24.2% 35.9% 10.9% Tampa 29ers 30.1% 2.9% 19.4% 12.6% 15.0% 2.4% 9.7% 5.8% 1.9% Wichita Speed 16.6% 2.4% 8.9% 2.0% 4.7% 5.5% 30.8% 21.7% 7.5% 1.5%   |          | Oklahoma City Race Equipment | 8.4%     | 1.0%    | 2.6%  | 7.5%  | 9.3%  |     | 7.1%     | 33.1%   | 24.2%  | 6.8%  |
| Pittsburgh Mountain Machines - 29.4% 3.2% 13.8% 8.8% 15.6% - 2.1% 12.5% 9.3% 5.3% - 5.4% 22.8% 14.4% 5.9% - 5.4% 22.8% 14.4% 5.9% - 5.4% 22.8% 14.4% 5.9% - 2.6% 20.1% 21.6% 5.4% - 2.6% 20.1% 21.6% 5.4% - 2.6% 20.1% 21.6% 5.4% - 2.2% 23.1% 16.7% 8.1% - 2.2% 23.1% 16.7% 8.1% - 2.2% 23.1% 16.7% 8.1% - 2.2% 23.1% 16.7% 21.6% - 2.2% 23.1% 16.7% 21.6% - 2.2% 23.1% 16.7% 21.9% 12.6% - 2.2% 23.1% 16.7% 21.9% 12.6% - 2.2% 23.1% 16.7% 21.9% 12.6% - 2.2% 23.1% 21.9% 12.6% 12.9% 12.6% 12.9% 12.9% 12.6% 12.9% 12.9% 12.6% 12.9% |          | Philadelphia Bike Shop       | 16.7%    | 1.2%    | 7.3%  | 10.6% | 11.8% |     | 3.7%     | 23.3%   | 15.5%  | 9.8%  |
| Portland Bi-peds 17.9% 1.9% 5.7% 13.0% 12.9% 5.4% 22.8% 14.4% 5.9% Providence Bi-peds 18.5% 1.1% 7.4% 10.0% 13.5% 2.6% 20.1% 21.6% 5.4% 5.4% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 16.7% 8.1% 2.2% San Francisco Cruisers 10.4% 1.1% 8.8% 1.3% 6.4% 5.3% 32.1% 21.9% 12.6% 5.3% 32.1%  |          | Phoenix Bi-peds              | 16.0%    | 2.0%    | 6.0%  | 12.5% | 14.4% |     | 5.3%     | 21.8%   | 17.2%  | 4.8%  |
| Providence Bi–peds 18.5% 1.1% 7.4% 10.0% 13.5% 2.6% 20.1% 21.6% 5.4% San Antonio Bike Shop 15.1% 2.2% 6.5% 12.9% 13.4% 2.2% 23.1% 16.7% 8.1% 2.2% 23.1% 16.7% 8.1% 3.4% 2.2% 2.3% 3.1% 1.3% 6.4% 5.3% 32.1% 21.9% 12.6% 3.2% 3.1% 11.7% 4.7% 24.2% 35.9% 10.9% 3.4% 3.4% 3.4% 3.4% 3.4% 3.5% 3.4% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5   |          | Pittsburgh Mountain Machines | 29.4%    | 3.2%    | 13.8% | 8.8%  | 15.6% |     | 2.1%     | 12.5%   | 9.3%   | 5.3%  |
| San Antonio Bike Shop - 15.1% 2.2% 6.5% 12.9% 13.4% - 2.2% 23.1% 16.7% 8.1% - 2.2% 23.1% 8.1% - 2.2% 23.1% 8.1% 23.1% 8.1% 23. |          | Portland Bi-peds             | 17.9%    | 1.9%    | 5.7%  | 13.0% | 12.9% |     | 5.4%     | 22.8%   | 14.4%  | 5.9%  |
| San Francisco Cruisers - 10.4% 1.1% 8.8% 1.3% 6.4% - 5.3% 32.1% 21.9% 12.6% - 5.3% Seattle Race Equipment - 6.2% 0.8% 2.3% 3.1% 11.7% - 4.7% 24.2% 35.9% 10.9% - 4.7% 24.2% 35.9% 10.9% - 2.4% 9.7% 5.8% 1.9% - 5.5% 30.8% 21.7% 7.5% - 5.5% 21.0% - 5.5% 21.0% - 5.5% 21.0% - 5.5% 21.0% - 5.5% 21.0% - 5.5% 21.0% - 5.5% 21. |          | Providence Bi-peds           | 18.5%    | 1.1%    | 7.4%  | 10.0% | 13.5% |     | 2.6%     | 20.1%   | 21.6%  | 5.4%  |
| Seattle Race Equipment - 6.2% 0.8% 2.3% 3.1% 11.7% - 4.7% 24.2% 35.9% 10.9% - Tampa 29ers - 30.1% 2.9% 19.4% 12.6% 15.0% - 2.4% 9.7% 5.8% 1.9% - Wichita Speed - 16.6% 2.4% 8.9% 2.0% 4.7% - 5.5% 30.8% 21.7% 7.5% -   |          | San Antonio Bike Shop        | 15.1%    | 2.2%    | 6.5%  | 12.9% | 13.4% |     | 2.2%     | 23.1%   | 16.7%  | 8.1%  |
| Tampa 29ers 30.1% 2.9% 19.4% 12.6% 15.0% 2.4% 9.7% 5.8% 1.9% Wichita Speed 16.6% 2.4% 8.9% 2.0% 4.7% 5.5% 30.8% 21.7% 7.5%   |          | San Francisco Cruisers       | 10.4%    | 1.1%    | 8.8%  | 1.3%  | 6.4%  |     | 5.3%     | 32.1%   | 21.9%  | 12.6% |
| Wichita Speed - 16.6% 2.4% 8.9% 2.0% 4.7% - 5.5% 30.8% 21.7% 7.5% -  |          | Seattle Race Equipment       | 6.2%     | 0.8%    | 2.3%  | 3.1%  | 11.7% |     | 4.7%     | 24.2%   | 35.9%  | 10.9% |
|  |          | Tampa 29ers                  | 30.1%    | 2.9%    | 19.4% | 12.6% | 15.0% |     | 2.4%     | 9.7%    | 5.8%   | 1.9%  |
| Country Race Lat Bike One Mouthout Stort Trail   |          | •                            |          | 2.4%    | 8.9%  | 2.0%  | 4.7%  |     | 5.5%     | 30.8%   | 21.7%  | 7.5%  |
| Contign, Est Mon. 2. Choo, Elife Listin  |          |                              | 2300     | Bike    | rtain | Sport | Trail | ı l | cioss    | 2020    | 2020   | Salon |
| , o  |          | Caurit                       | 4, 48    | Chel Wo | 'n.   | J.    |       | CY  | HOL FIII | e, manc | 8' Kil | di.   |
| Godes  |          | Cross C                      |          | J       |       |       |       |     |          |         |        |       |

Bike Type (Category 2)

#### **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)

