# Customer Segmentation

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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.

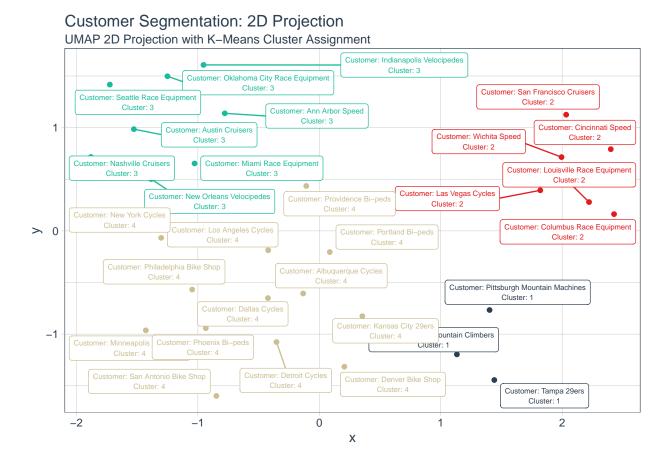
# **Heatmap of Purchasing Habits**

		Mountain	Road
	Albuquerque Cycles	6.783 <b>22,9</b> 468 <b>5%</b> 454 <b>52</b> /237 <b>76%</b> 28671	2.44755 <b>2</b> 4.1258 <b>7</b> 7 <b>8</b> .88112 <b>4</b> /54545%
	Ann Arbor Speed	.3156 <b>0%</b> 644 <b>5</b> %561 <b>5%</b> 412 <b>0%</b> 42869	6.64452 <b>3</b> 7.0431 <b>22</b> 3.58804 <b>8</b> 60399%
	Austin Cruisers	.5365 <b>9%</b> 130 <b>2%</b> 3252 <b>%</b> 788 <b>662%</b> 0407%	3.6585437.3983713.918709434959%
	Cincinnati Speed	5.345 <b>27.2</b> 557 <b>5%</b> 611 <b>9</b> %672 <b>6</b> %3811%	6.13811 <b>3</b> 0.9462 <b>22</b> 3.78517 <b>9</b> 646292%
	Columbus Race Equipment	8.02030076614 <b>8%</b> 218 <b>3%</b> 5228 <b>4%</b> 61421%	4.56853 <b>27</b> .6649 <b>22</b> 3.85787 <b>7</b> .86802%
	Dallas Cycles	7.521317.22820157800815578034222401719	4.70085 <b>20</b> .9401 <b>7%</b> .37607 <b>4</b> ⁄27350%
	Denver Bike Shop	3.859 <b>1297</b> 379 <b>9</b> 3213395/862 <b>23</b> 386180	3.65059 <b>%</b> 3.9 <b>5</b> 046 <b>%</b> 77879 <b>%</b> .08561%
	Detroit Cycles	7.261900\$9206783016782381117/50794	6.34921 <b>22</b> .420 <b>63</b> 7.65873 <b>5</b> .655556%
	Indianapolis Velocipedes	0.3448 <b>B2</b> 539 <b>2</b> 22539 <b>2</b> 9/598 <b>752</b> 49	3.76176 <b>3</b> 7.6175 <b>52</b> 4.13793 <b>5</b> 495611%
	Ithaca Mountain Climbers	9.98418,977866,61392,623428,49620	1.898731/1.313298/06962%.32278%
	Kansas City 29ers	5.8138288810899311145%076 <b>06</b> %862299	3.08269 <b>%</b> 2.59003 <b>%</b> 44973 <b>%</b> .31317%
	Las Vegas Cycles	5.98 <b>718%</b> 615 <b>43</b> %416 <b>607.%</b> 807 <b>7</b> %00641%	4.16667 <b>2</b> 8.6859 <b>27</b> .16026 <b>9</b> .13462%
	Los Angeles Cycles	4.465 <b>42.20</b> 12 <b>62</b> 32 <b>704</b> /450 <b>9225</b> 78629	3.4591224.383657.295607.23270%
	Louisville Race Equipment	4.683 <b>514%</b> (89 <b>9%</b> 139 <b>2%</b> 2531 <b>6%</b> 3544%	3.54430 <mark>3</mark> 6.2025 <b>32</b> %.26582 <b>6</b> %58228%
Customer	Miami Race Equipment	.5842 <b>7</b> °2640 <b>2°6</b> 685 <b>40</b> %533 <b>77</b> . <b>0</b> 2247°	7.86517 <b>9</b> 2.0224 <b>72</b> 3.45506 <b>7</b> 658427%
	Minneapolis Bike Shop	7.6560 <b>2.%</b> 309 <b>0%</b> 529 <b>%</b> %41 <b>25</b> %15525	6.39269 <b>2</b> 3.7442 <b>9%</b> .04718 <b>5</b> 647945%
	Nashville Cruisers	.8265 <b>9%</b> 670 <b>2%</b> 231 <b>2%</b> 595 <b>9</b> 224855%	6.64740 <mark>32.658962</mark> 2.25434 <b>7</b> 651445%
	New Orleans Velocipedes	i.8478 <b>9%</b> 521 <b>7%</b> 695 <b>7%</b> 304 <b>7%</b> 2609%	6.41304 <b>3</b> 0.9782 <b>6%</b> .54348 <b>9</b> 623913%
	New York Cycles	9.0123353487663419753%123462%245689	3.9506222.7160593.271606/17284%
	Oklahoma City Race Equipment	.3982 <b>7%</b> 389 <b>6%</b> 974 <b>0%</b> 324 <b>9%</b> 6407%	7.09957 <mark>3</mark> 2.0735 <b>9</b> 24.24242 <mark>6</mark> 675325%
	Philadelphia Bike Shop	6.734 <b>692</b> 244 <b>9</b> %46940%612 <b>24</b> %3673	3.67347 <b>2</b> 3.2653 <b>11%</b> .51020 <b>9</b> 679592%
	Phoenix Bi-peds	5.9971 <b>8%</b> 732 <b>8%</b> 901132%473 <b>5</b> 7%44679	5.2854124.8463773.195214.79211%
	Pittsburgh Mountain Machines	9.442937,9830123%793180,97533125%64987	2.12202 <b>%</b> 2.46684 <b>9</b> 628382 <b>%</b> .30504%
	Portland Bi-peds	7.857114 <b>%</b> 633 <b>5</b> %45344 <b>%</b> 043 <b>42%</b> 88820°	5.4347822.826094.440995690062%
	Providence Bi-peds	8.4501 <b>8%0707%8</b> 800 <b>9%963103%</b> 46863°	2.58303 <b>2</b> 0.1107 <b>2%</b> .58672 <b>5</b> /35055%
	San Antonio Bike Shop	5.053 <b>7253</b> 505 <b>6</b> 34516112/2003 <b>23</b> 3440869	2.1505423.1182896.666678606452%
	San Francisco Cruisers	0.427811.9695 <b>2%</b> 235 <b>3</b> %369 <b>6%</b> 17119	5.3475932.085562%.92513128.56684%
	Seattle Race Equipment	i.2500 <b>0</b> %812 <b>2</b> %437 <b>5</b> %250 <b>0</b> %71875	4.6875024.218755.9375000.93750%
	Tampa 29ers	0.0970 <b>2</b> 9426 <b>2</b> 9/417 <b>42</b> 9621 <b>36</b> 904854	2.42718%.70874%.82524%.94175%
		6.568025366889875743972397833739	5.5226830.769232%.696257%49507%
	Cicissanti	6.56805366883875743972383833739	5.5226830.7692324.6962577.49507%
	c Count	O'st No	Cho. Flyr days Liss
	Cio <sub>ss</sub>		(Catagory 2)

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.

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