Client is a women's endurance sports brand based in LA, California. It sells goods via online website and via wholesale partners. As part of their marketing plan, they sponsor amateur athletes called "Ambassadors" and professional athletes "Professionals" to promote their clothing. Professionals receive monetary compensation while the ambassadors only receive free product. These individuals are expected to share information about clothing to their friends and acquaintances in an effort to drive sales.

Client would like to accomplish the following:

- 1. Create a map of customers, ambassadors, and professionals using some type of Graphical Information System tool. Add wholesale partner location to the map
- 2. Analyze the sales data to try and answer the following questions
- a. Do we get more online customers from a designated marketing area ("DMA") if we have an ambassador within 25 miles of that area?
- b. Do we get more sales from online customers if we have multiple ambassadors in the DMA?
- c. Do sponsored professional athletes drive more online sales in their DMA than the ambassadors?
- d. What impact does having a wholesale partner have on our online sales in each DMA?

DMA = zip code

Attached excel file that has two tabs. The first tab contains the following:

- A list of all of online customers
- Customer names & addresses
- The number of orders they have placed
- The total dollar amount for all their orders combined
- An indicator signifying if they are a ambassador or sponsored professional athlete

The second tab contains the names and addresses for all of client's wholesale partner locations. These are brick and mortar shops that buy client's merchandise at wholesale prices and then sell it to the end customers.

Instructions

- 1. You can use R or Python for data processing and statistical analysis.
- 2. You need to proceed with your analysis step by step and be able to describe those steps and methodology in an online or in person demo.
- 3. You are free to make any assumptions if you want but it should be logical and well explained.
- 4. Submission should include all code files (well formatted and organized) & presentation with problem statement, approach, findings and recommendations for retailer.