**Predict the Number of Tips Needed to Attain one Point Higher than the Highest Rating in the Area**

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Background

An individual is looking to open a new coffee shop. They need recommendations for an approximate location to setup their new coffee shop and approximately how many Tips they will need to attain one point higher than the highest rating in their area.

Description of the Problem

An individual has money to invest in the startup of a new coffee shop and would like to hire a consultant to use statistical analysis to advise them as to where a good location in Toronto, CA is to start a new coffee shop and use machine learning to tell them how many Tips they will need to attain the goal of one point higher than the highest rating in the area.

The stakeholders in this project are myself and an individual investor that would like to open a new coffee shop in the area of Toronto, CA.

Description of the Data

The data utilized will be from the Foursquare API. This data will be used to determine such things as the number of coffee shops in the area, their price point, which will be categorized as, “Cheap”, “Moderate” and “Expensive”. I’ll also look at several consumer sentiment metrics such as the “Rating” of the coffee shop and the number of, “Likes” the coffee shop received and finally, “Count of Tips” recorded by the API for each coffee shop. This information needed will be considered, a “premium call” and therefore the dataset size will be very small as a result, as I only have a limited amount of, “premium calls” per diem.

The, “Count of Tips” variable will be used as a feature to build a Simple Linear Regression (SLR) model to predict the, “Rating”. Then, the Simple Linear Regression prediction equation will be used to answer the question of, what is the estimated, “Count of Tips” needed to achieve a “Rating” that is one point higher than the highest “Rating” in the dataset?

References

<https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M>

<http://cocl.us/Geospatial_data>

<https://api.foursquare.com>