Market Analysis for Starbucks –

1. What is the spread of Starbucks today ?

After plotting the latlong for Starbucks using Google maps api, we inferred that the store is prevalent in metro areas than rural areas. The Metro cities have a large concentration of Starbucks.

1. Are there more than 1 Starbucks in a city ?

For larger cities, there are multiple Starbucks. New York City has the highest number of Starbucks – 240, followed by Chicago, Las Vegas and Seattle with more than 150 stores.

1. What were the data resources used and how ?
2. Starbucks latlong and address information for all stores were available at Kaggle. This dataset was used to plot the existing Starbucks and profile the zipcodes.
3. Census information was downloaded using the census api. This dataset has the 4 attributes considered for profiling – Household income, Employment number, Percapita Income, Median Age.
4. Zipcode dataset was installed from zipfile package. This database is used to remove other zipcodes from recommendations file within 2 miles of existing Starbucks.
5. State to latlong file. This file had the centroid of each state. This was used to plot the heat map for number of Starbucks by state.
6. What are the assumptions made and factors not being considered ?
7. We are considering only 4 attributes and assuming that the zip codes can be profiled using these attributes.
8. Weather was not factored in.
9. Political inclination and corporate directions were not included.
10. The average of the 4 attributes for zip codes that have Starbucks were taken for the entire country. Ideally the analysis should have been split by region as these attributes can vary by region.
11. One zip can have only 1 store and that new recommendations cannot be made if there is an existing store within 2 miles.
12. What was the Null Hypothesis used and was it rejected ?

Null Hypothesis used was that the 4 attributes varies significantly between the zips that have Starbucks and that do not. After doing an independent t test, based on the p-value, the null hypothesis was not rejected. Thus, we concluded that the 4 attributes used are statistically different between zip codes with and without Starbucks locations.

1. How many recommendations were made ?

After profiling on the 4 attributes, 7,957 zip codes were recommended for opening Starbucks locations. These were checked for existing stores within 2 miles and finally 7,464 zip codes were recommended.

1. Finally, is there evidence to support that Strabucks is a saturated market ?

Starbucks is not a saturated market and around 7000 recommendations were made.