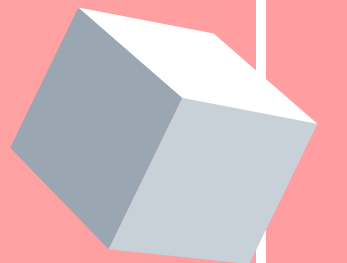


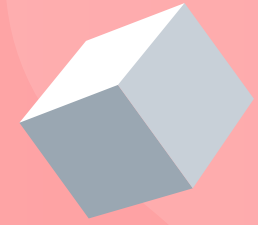


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PRESENTATION

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# FINDING THE BEST NEIGHBORHOOD IN CHICAGO, IL TO OPEN A NEW STARBUCKS SHOP



- Coffee is one of the most popular drink all over the world.
- The United States imports in excess of 4 Billion worth of coffee per year. Americans consume 400 million cups of coffee per day making the United States the leading consumer of coffee in the world.
- In this analysis, I will find best spots in Chicago, IL to open and operate new coffee shop. This analysis is for two types of business people :
  - a. Starbucks stakeholders
  - b. Coffee businesspeople

For this problem I need 2 types of data :

- Chicago Census Data.

This data will be used to find and classify best neighborhoods of Chicago

- Location data of Starbucks.

Secondly, to get location of Starbucks Coffee shops I will leverage Foursquare.

Finally, with these data I will determine which place is best to open a new Starbucks coffee Shop.

- Firstly, I will import the Chicago Census Data and use it to cluster Chicago neighborhoods.
- I will use K means clustering algorithm to cluster neighborhoods
- I will use Standart Scaler
- I will choose 4 best neighborhoods to analyze further.

- I will use Foursquare to get the location of each neighborhood that I will use.
- Then I will visualize them on the map.
- Visualize each spot on the map with neighborhood centers.
- I am going to analyze further and use statistics to improve my analysis

- I will create a new dataframe containing all of the data from individual neighborhoods dataframe describe a method.
- In here we observe again that, Near North is very crowded and ratings are high. On the other hand, Lincoln park is less crowded and the ratings are very
- Lets Use Seaborn library to visualize ratings for each neighborhood
- Now let's use boxplots to compare each of them and visualize at the same graph

- My conclusion is that Lake View is the best
- The Loop on the other side is fairly crowded. There is some kind of need for a new better serving shop.
- Thirdly, Lincoln Park has only 3 shops. It is definitely now crowded but the average rating is 7.9 which is very high. With a small amount of sample, it is hard to find a reason to open a new restaurant there.
- Finally, I think the Near North Side is the worst place to operate. It is very crowded, has a decent average score.



- Purpose of this project was to identify the best spot in Chicago neighborhoods to open a new Starbucks shop. Firstly I used the KMeans clustering algorithm to cluster neighborhoods in order to find the best of them. Then I leveraged Foursquare to get shop detail and their ratings to analyze. Finally Using data visualization methods and Statistical inferences to find optimal spots to open a new Starbuck shop.
- Also, I discussed possible flaws in my analysis such as data scarcity and missing of population data.
- The final decision on optimal shop location will be made by stakeholders based on specific characteristics of neighborhoods and locations in every recommended zone, taking into consideration additional factors like shop ratings, neighborhood attractiveness possible impact of missing data and etc.