Introduction

This report aims to solve the problem of a new chain of coffee shop that will soon be moving to New York City. The coffee shops will be located across New York city. However, the client wants to start the business in Bronx which is a Borough in New York City. The owner of the proposed coffee shop then walked up to me as a data analyst and asked for my help.

I initially asked him for his proposed target for purchasing of the coffee and he responded by saying he would like to target the busiest part of the city. I responded by telling him that the coffee shop will be located in the busiest part of the city.

Another suggestion he agreed with was that he will start with less than 10 locations in Bronx and then the chain of stores will expand based on the success of the first stores that will be established and he duly agreed with my take on this establishment. Another consideration is that the stores will be located within 10000m radius of the center of Bronx. This is to allow for easy supervision and control of the activities of the stores

Data Collection

The data for the analysis will be gotten from Foursquare. Foursquare is a company that provide data for several big companies including google and uber. Foursquare provides data even to the neighborhood level. The granularity of data from Foursquare will also help the easy navigation and understanding of the city. With the extent of their popularity and reliability of this company, they will serve me well for my analysis.

The data gotten from Foursquare was analyzed using python and inferences drawn to choose the best locations.

Methodology

The data gotten from foursquare were passed through several analysis in python. Some of the analysis include

- Conversion of received Data to table: This was the preprocessing carried out on the data which made it easier to analyze
- All the Venues that fell within the Bronx Borough were extracted from the initial table and then formed a table of their own.
- All the venues that were of type coffee shop were all removed from the table. This is because we won't be establishing a new coffee shop on another existing coffer shop.
- The top 100 venues were selected.
- The top 100 venues were converted to a table of their own and were then grouped based on the present Neighborhood
- To meet the target of the Client, each Neighborhood was to have a coffee shop per every 10 popular venues.
- A pie chart was used for the exploratory analysis to better describe the result

Result

After the analysis it was discovered that the top 100 venues according to foursquare were located across five different Neighborhoods in Bronx. The table below shows the Neighborhood and the number of venues

	Neighborhood	Count
0	Co-op City	19
1	Eastchester	24
2	Fieldston	3
3	Kingsbridge	35
4	Riverdale	11

Discussion

It could be seen that the table consists of the top 5 Neighborhoods and it could be seen that the highest venue in a neighborhood is 35 while the lowest is 3. Based on the methodology of not more than one coffee shop per 10 venues, the table below shows the number of coffee stores per each Neighborhood.

Neighborhood	No of Shops
Co-op City	2
EastChester	2
FieldSton	1
Kingsbridge	3
Riverdale	1

The table above shows the client will be starting with 9 coffee stores which falls within the number of stores i=he intended to start with.

Conclusion

Based on the accuracy of the data always gotten from Foursquare, the client should be rest assured of the best delivery of the product and should expect maximum patronage.