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THE BATTLES OF NEIGHBORHOODS

COLOMBIA MÁGICA RESTAURANT

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New York City a good place to set up a Colombian restaurant?



1. Business problem

Colombia Mágica is a Colombian restaurant chain with over 12 years in the market and with positioning in the main cities of the country.

The owners have decided to open a franchise in the USA, understanding that in this country there is a growing colony of Hispanics, thus Colombian people. They chose New York city based on the economy and the development importance for the country.

The stakeholders want to know who is going to be their competency and the localities recommended by our team.

1.1 Key points

- The Hispanic/Latin population in the locality.
- The population of each locality.
- Colombian and Hispanic food venues in each locality
- To define the appropriate neighborhood.

2. Data Description

The New York State data is key as the first step for the development of the project; understanding that the specific information we need is about the Hispanic population, this same isn't widely available or easy to find.

This means that the Wikipedia page is not a good resource.

We gather the data from statistical portals both public and private.

This data should contain the necessary information like the amount of Hispanic population in each state of the USA, which is the main key.

We will explore the Hispanic venues available in the location assigned, do this, and will go to use the location provider Foursquare.com.

Through this data, we can determine if the venue has the category as Colombian restaurant or other Hispanic country and the amount of them in the area, in this way, the stakeholders will use it for subsequent market analysis and make the best decisions against the competition.

2.1 Resources

- Hispanic population of the United States, by state [Click Here](#)
- Kings County (Brooklyn Borough), New York [Click Here](#)
- Queens County (Queens Borough), New York [Click Here](#)
- New York Geolocations [Click Here](#)

3. Methodology

In the first step, we compared the quantity of Hispanics living in New York State faced to the other states.

That showed us that NY State is the fourth state with the major quantity of Hispanic inhabitants after Los Angeles, Texas, and Florida.

Table 1. Top ten states with the largest Hispanic population.
(in 1,000s)

hispanic_population	
state	
California	15540.0
Texas	11369.0
Florida	5562.0
New York	3753.0
Arizona	2266.0
Illinois	2209.0
New Jersey	1839.0
Colorado	1235.0
New Mexico	1029.0
Georgia	1022.0

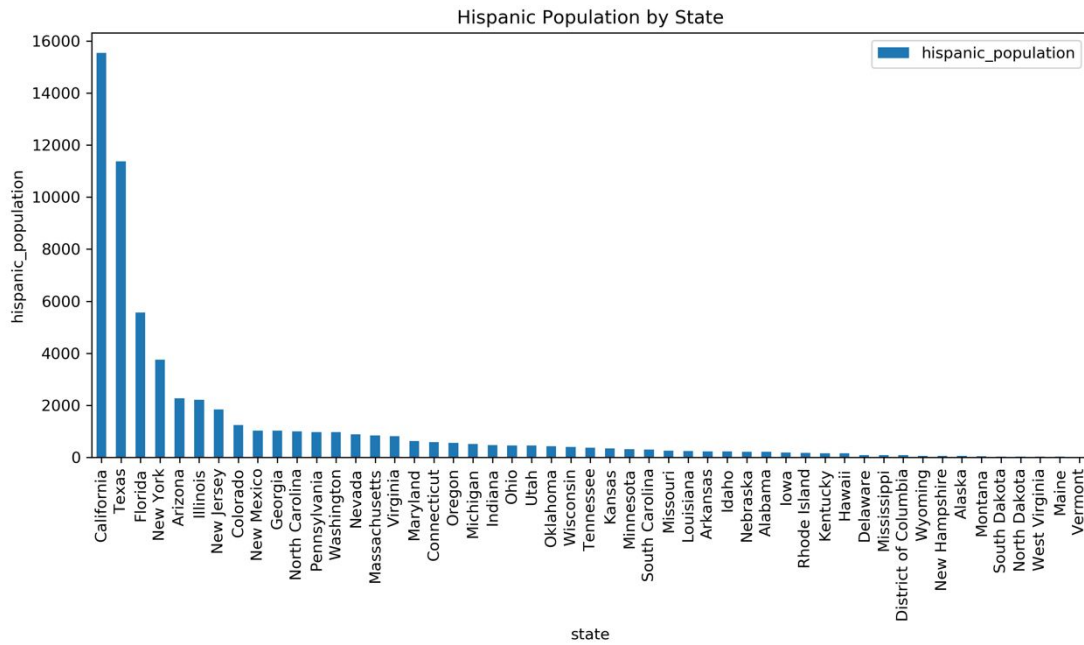


Figure 1. Bar Chart of Hispanic population in the USA by state.

As we need more information about the NY State, specifically the quantity of Hispanics in this territory, and in the different counties. We achieved this objective with statistics from the United States Census Bureau web page.

In the same way, we needed the geolocation of the counties, for that reason, we used a .json file that contained all the coordinates of New York, and thus through this information achieved the objective.

According to the results shown above, we would use the geocoder API in order to obtain information about the different Hispanic venues. And the location information provider Foursquare.com is one of the best sources to achieve this task.

4. Results

Queens County has the largest Hispanic population even though the total population is smaller than Kings County. This last state has a population of **2,559,903** and **18.9%** represents the Hispanic population, that is, **483,822**. On the other hand, Queens has a total population of 2,253,858 and 28.2% represents the Hispanic population, that is, **635,588**. This means that Queens has **151,766** more Hispanic inhabitants, for this reason, we chose this county to continue conducting the study.

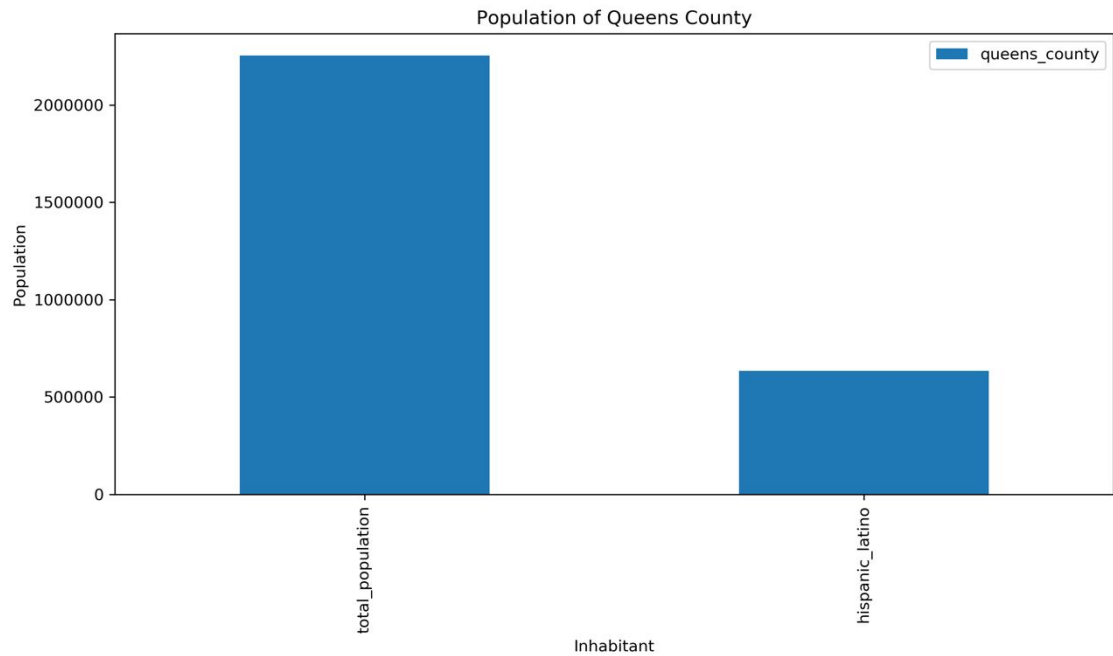


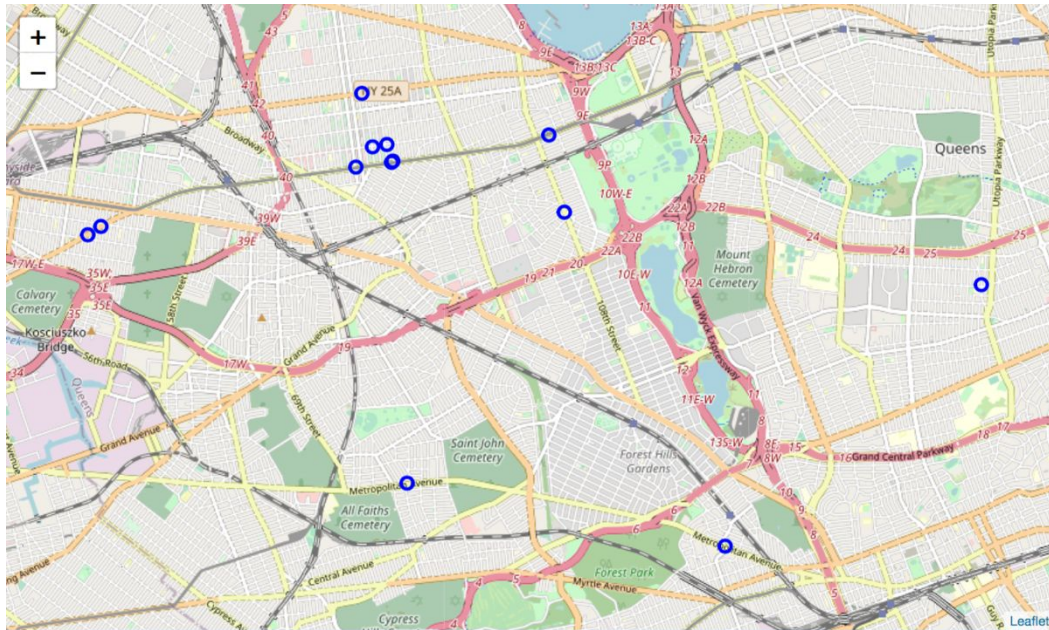
Figure 2. Bar Chart of Hispanic population in Queens County.

In the Queens Borough, we could corroborate that there are 13 venues with a category of South American restaurant; it should be clarified that there are no categories such as "Latin restaurant", "Hispanic restaurant" or "Colombian restaurant"; according to the information collected in Foursquare.

It can be denoted in the table that five of these venues are in the Jackson Heights neighborhood; Also, searching the web, we could see that 10 of them are Colombian, two Uruguayans and one Hispanic; that is, it offers dishes from different Latin countries.

Table 2. South American restaurants in Queens.

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue_Lat	Venue_Long	Venue_Category
177	Jackson Heights	40.751981	-73.882821	La Nueva Bakery	40.750134	-73.880227	South American Restaurant
178	Jackson Heights	40.751981	-73.882821	El Chivito D' Oro	40.749833	-73.882376	South American Restaurant
215	Jackson Heights	40.751981	-73.882821	Pollos Mario #3	40.748220	-73.879639	South American Restaurant
244	Jackson Heights	40.751981	-73.882821	La Perrada de Chalo	40.755737	-73.883982	South American Restaurant
249	Jackson Heights	40.751981	-73.882821	Casa Colombia	40.748263	-73.879485	South American Restaurant
274	Elmhurst	40.744049	-73.881656	Pollos a la Brasa Mario	40.747659	-73.884806	South American Restaurant
320	Corona	40.742382	-73.856825	El Palacio De Las Empanadas	40.742674	-73.854700	South American Restaurant
370	Kew Gardens	40.705179	-73.829819	Tu Casa Restaurant	40.706113	-73.831586	South American Restaurant
581	Sunnyside	40.740176	-73.926916	I Love Paraguay	40.741087	-73.921490	South American Restaurant
589	Sunnyside	40.740176	-73.926916	La Pollera Colorada	40.740247	-73.923419	South American Restaurant
1733	North Corona	40.754071	-73.857518	Los Amigos Chimichurri	40.751195	-73.856925	South American Restaurant
1799	Utopia	40.733500	-73.796717	Tienda Vieja	40.734717	-73.794717	South American Restaurant
2035	Middle Village	40.716415	-73.881143	Rico's Chicken	40.713009	-73.877336	South American Restaurant



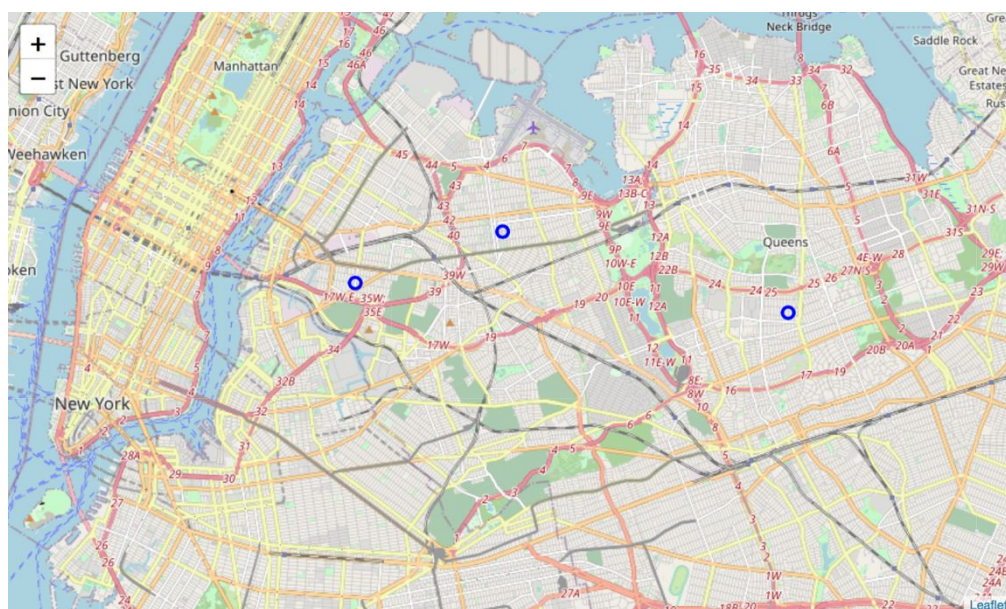
Map 1. Locations of the 13 venues.

5. Discussion

Due to the filter related to the category of the venue, when applying one-hot encoding and using the machine learning technique, K-Means. We were able to obtain the neighborhoods more frequently, which allows the managers of the Colombia Mágica restaurant to identify these locations.

Table 3. Most Common Neighborhood.

Venue_Category	1st Most Common Neighborhood	2nd Most Common Neighborhood	3rd Most Common Neighborhood
0 South American Restaurant	Jackson Heights	Sunnyside	Utopia



Map 2. Locations of the Most Common Neighborhoods.

6. Conclusion

Our recommendation is to carry out a more in-depth study of the Jackson Heights neighborhood, especially of the restaurants that are in this area to compete directly with them and be successful in the expansion plans.

And answering the question that opens this project; we consider that New York is a good place to open a Colombian restaurant, based on the findings; which are the growing Hispanic or Latino community and the economic strength of this region, known worldwide.

Successes for the business group!