# Analysis for new Restaurant in Lima-Perú

Carlos Gutiérrez

#### Analysis data before open a new Restaurant in Lima-Perú is crucal for success.

The location to define in which neighborhood would be good to place a new restaurant?, what kind of food are going to prepare?, would be a good idea to place a Peruvian restaurants or a foreign one?. These are some answers that need to be addressed in order to define what kind and where a new restaurant could be placed.

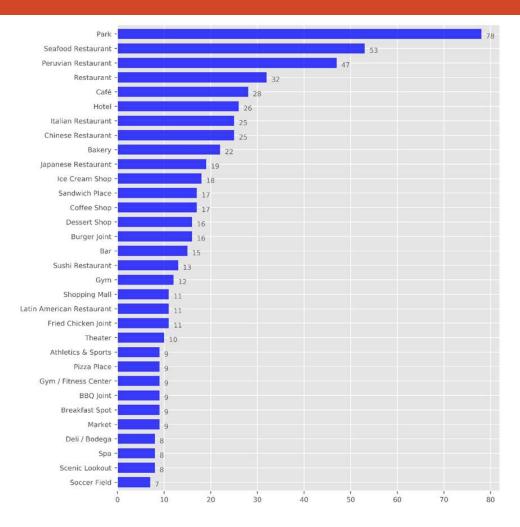
## Data acquisition and cleaning

Data of neighborhood to be analyzed from:

https://es.wikipedia.org/wiki/Anexo:Distritos\_de\_Lima

- Data of venues from: Foursquare.
- Analysying only 14 neighborhoods of 43.
- Simplify the data to main categories.

## Lima Venues by Category

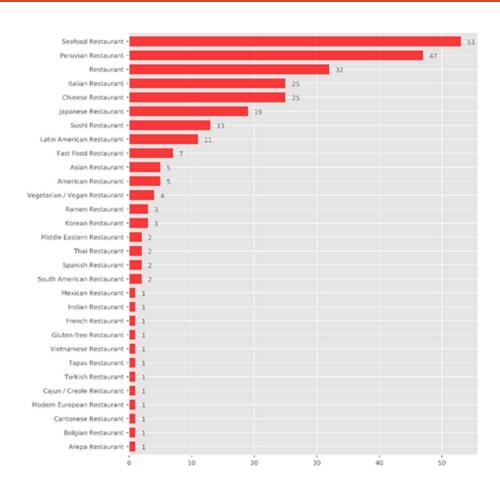


We grouped the venues by category resulting the three main categories are:

- Park
- Seafood restaurant and
- Peruvian restaurant

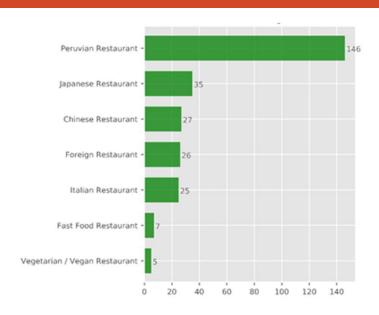
Also the fourth grouped venue is labeled as "Restaurant", this first result just confirm that the most popular venues in Lima are restaurants.

#### Restaurants in Lima

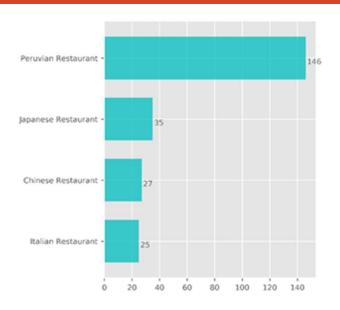


As we are looking for only restaurants then will drop all information not related to this category like, cafes, gyms, etc. We will filter the data using "Restaurant" word.

#### Restaurants by Category

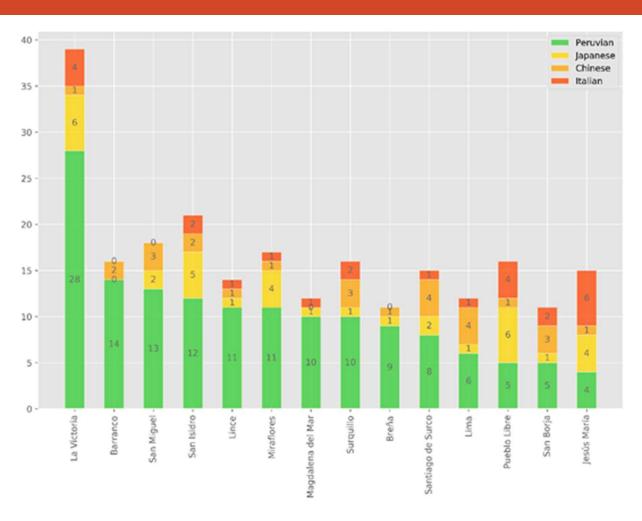


"Peruvian Food" is by far the most popular category having even more restaurants than the other categories together. But also is important to note that there are 4 foreign categories which have similar quantities of restaurants.



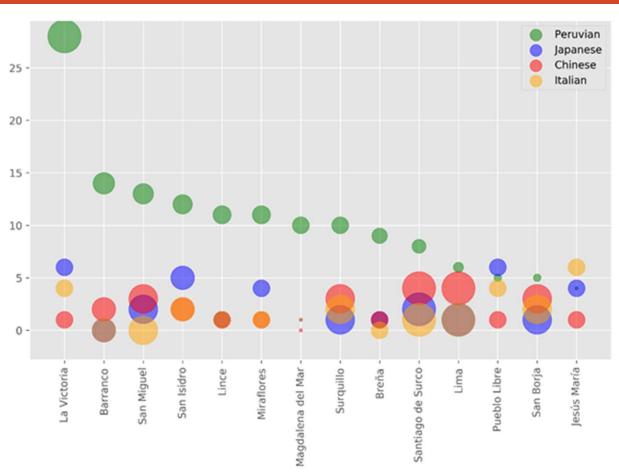
We will focus only in the four main categories and modify the data frame to show how many restaurants we have by neighborhood..

# Restaurants by Category for each neighborhood



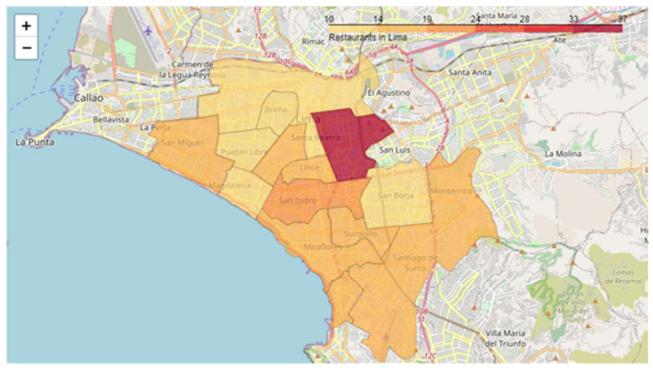
"La Victoria" is the neighborhood with most restaurants having the four categories but by far the "Peruvian Food" is most common, so maybe it wouldn't be a good idea to open a new restaurant in this neighborhood, at least not a Peruvian one.

## Restaurants by Category for each neighborhood



The others neighborhoods have a similar quantities of restaurants and most of them have the same tendency, we mean, the Peruvian Restaurant are the most common. Only in two neighborhoods (Pueblo Libre and Jesús María) the Peruvian restaurants are no the most common, in this two neighborhood prevails the Japanese and Italian food respectively, so it looks that there is room to new Peruvian restaurants.

# Restaurants by Category for each neighborhood



Distribution of the restaurants on the map help us to visualize where are the neighborhoods with most quantities of restaurants and which ones have less.

#### Conclusion

- Identifying the quantities and categories in each neighborhoods we can define the possible place as well as the category for new restaurant
- Through clustering of neighborhoods we can analyze their similarity from the point of view of venues which gave as insight to select the neighborhood.
- Verified that the Peruvian restaurants are the most popular by far and that.
- Improvements:
- The process of gathering data from Foursquare coulb be improved moving the initial point in order to cover more area.