# RESTAURANTS IN NEW YORK, NY

Bryan J. Hernandez

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#### GENERAL INFORMATION

- Description
  - The location is in New York, NY. The problem is to analyze the market within New York city. Specifically to focus on the Italian restaurants and the higher end of the venues.
- Audience
  - The target audience of this presentation is for either an owner trying to expand into a new market or a market researcher analyzing the climate of the venues within New York city.

# DATA ACQUISITION AND CLEANING

- Data Acquisition: Foursquare API
  - Base dataset
    - Location data for Italian venues within a 25-mile radius of New York City
    - Includes longitude and latitude, distance and category
  - Additional dataset
    - Adding features such as
      - Distance
      - Rating
      - Likes
      - Tier
      - Tips
  - Data Cleaning
    - Cleaning out features with null values, na values and non applicable categories

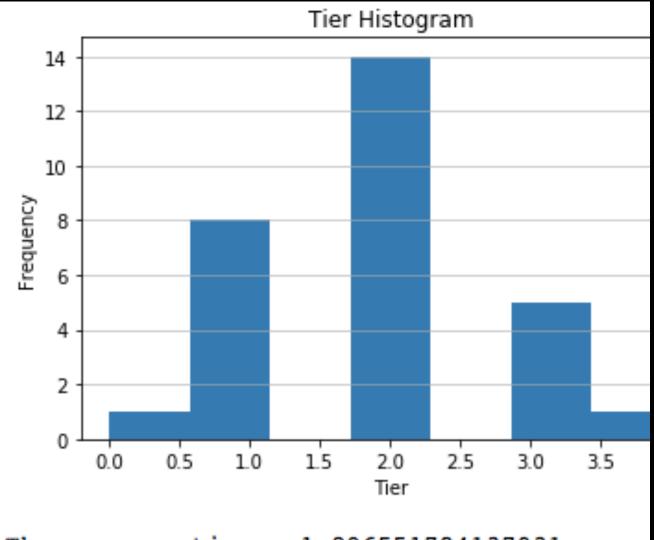
#### EXPLORATORY DATA ANALYSIS

- The methods to analysis the datasets included
  - Histograms
  - Scatterplots
  - Pearson's Correlation test

#### FREQUENCY BY TIER

The distribution of the tiers is centered around 2 suggesting that the majority of the locations are of a low-mid tier rating.

This implies that the market is open for a higher tier restaurant to come into the market.

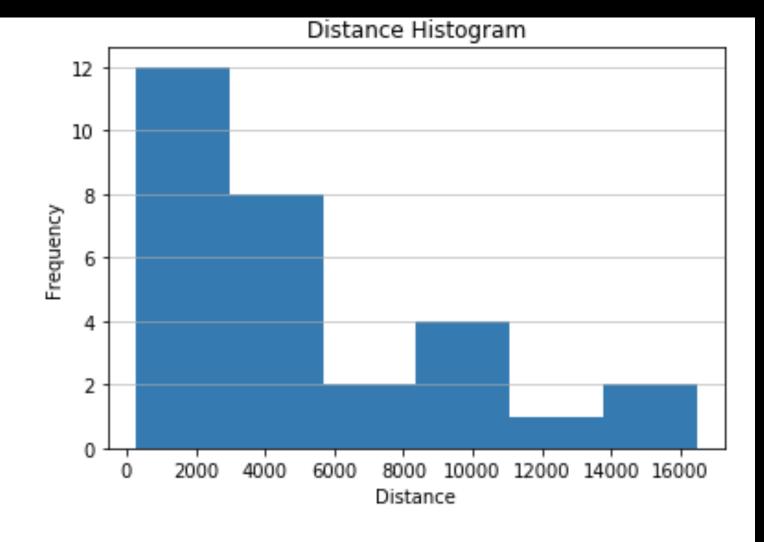


The average tier: 1.896551724137931

## FREQUENCY BY DISTANCE

This histogram shows that there is an increased amount of restaurants that are above 3.5 miles from the epicenter.

This might be an opportunity for a Italian restaurant within a closer proximity

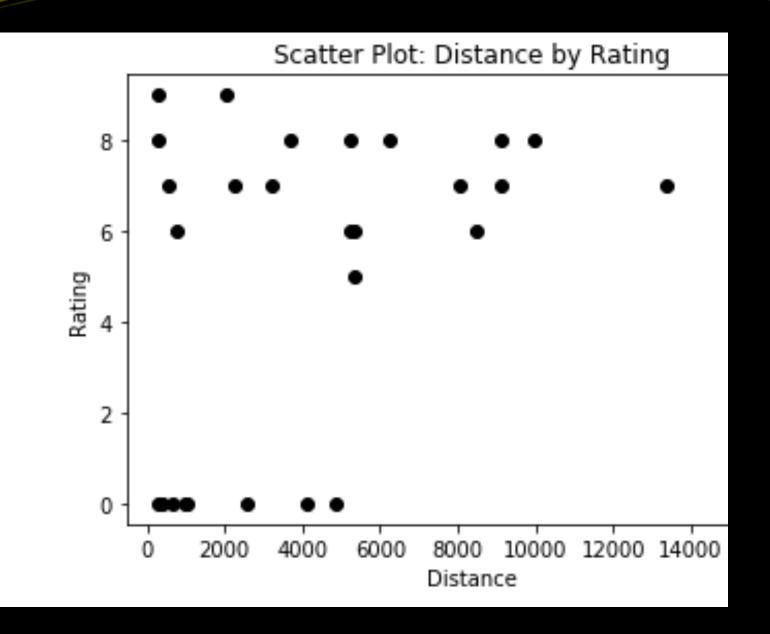


The average distance from center: 5021.6206896

## RATING BY DISTANCE

This locations within a distance of 3.5 miles are varying between 6-8 rating.

This might be an indication of consumers being open to new restaurants as there aren't many high rated restaurants in the close-proximity



#### CONCLUSION

- In conclusion the location of New York, NY has an opportunity for the following restaurants
  - High Tier
  - < 3.5 miles
- Further analysis
  - More information that would supplement the dataset and add a lot more value to the analysis would be
    - Rent dataset
    - Consumer traffic dataset
    - Market capture projection dataset