# DESCRIPTIVE ANALYSIS OF THE PRESENCE OF THE RESTAURANT INDUSTRY ACROSS MAJOR CITIES IN THE WORLD

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# UNDERSTANDING EATING HABITS IS VALUABLE FOR RESTAURANT BUSINESS OWNERS



Understanding how the population of a city interacts with the food industry is an important factor to predict potential success of relevant stakeholders



Many restaurant owners look to expand their business across various major cities. However, they have to adjust to the eating habits and general eating culture of the city they want to expand to.



A preliminary analysis of existing venues that represent the restaurant industry within such largely populated cities needs to be conducted so as to understand these concepts



## DATA ACQUISITION AND SOURCE



The choice of cities is as follows: (a) Asia: *Tokyo* (b) Africa: *Lagos* (c) Europe: *Istanbul* (d) Australia: *Sydney* (e) North America: *New York* (f) South America: *Sao Paulo* 



The location data for each of these cities i.e. latitude and longitude will be acquired from geopy library in pandas



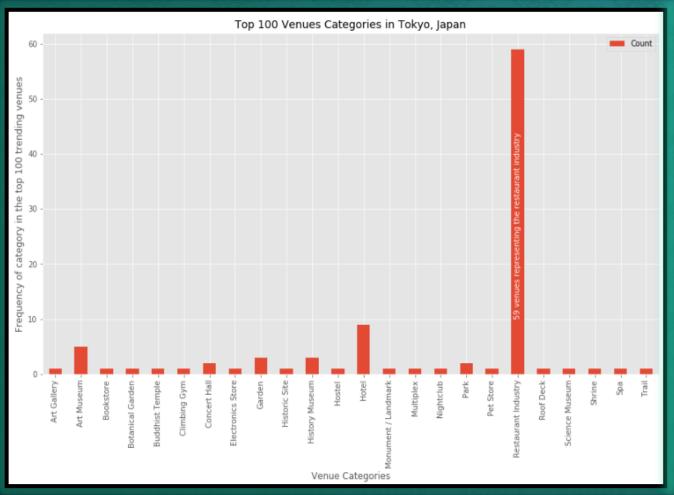
I used the services of the Foursquare API to get the venue data for each of the aforementioned city.

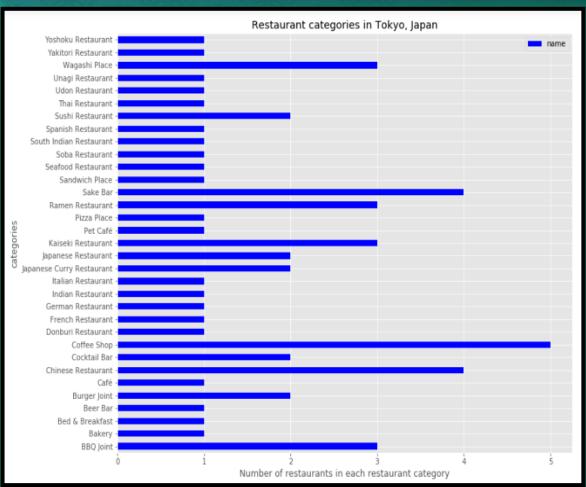


The population statistic used for analysis in this project will be the population density per square kilometre. Numbers pertaining to each city are based on census data

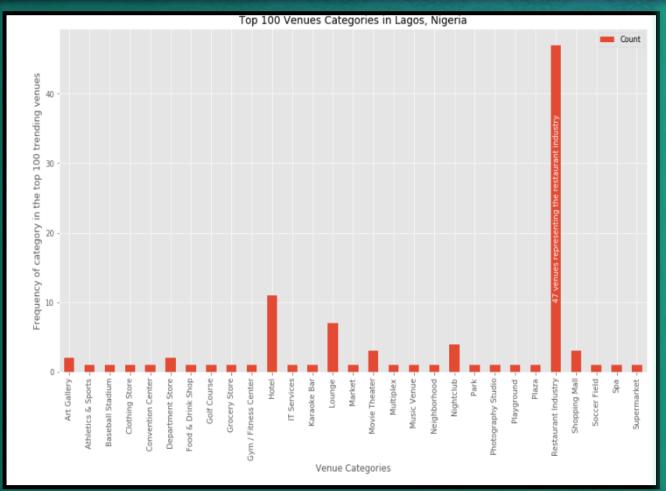


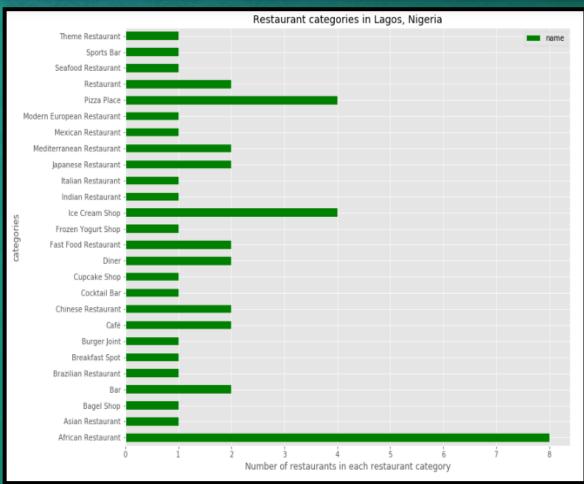
### **TOKYO VENUES**



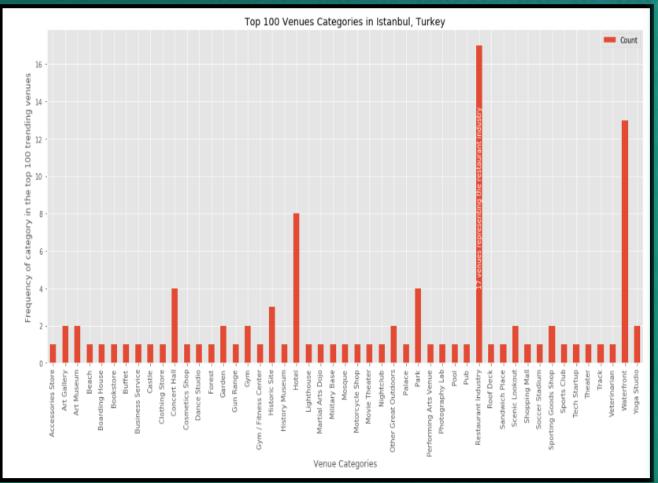


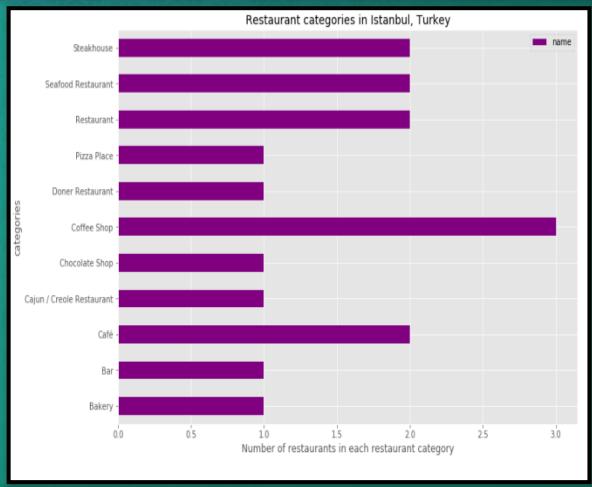
#### LAGOS VENUES





#### ISTANBUL VENUES

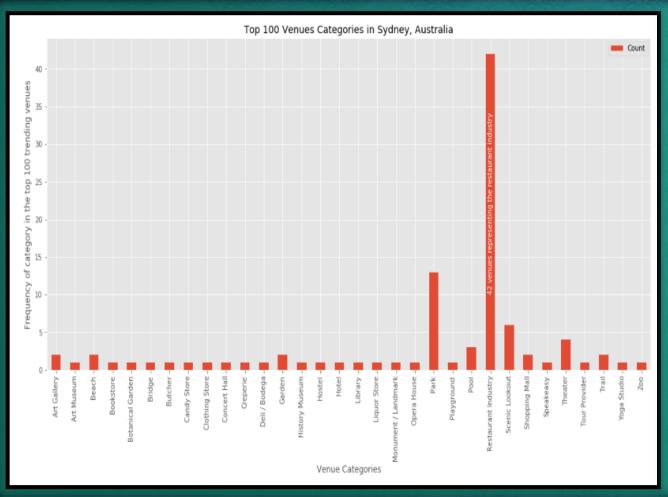


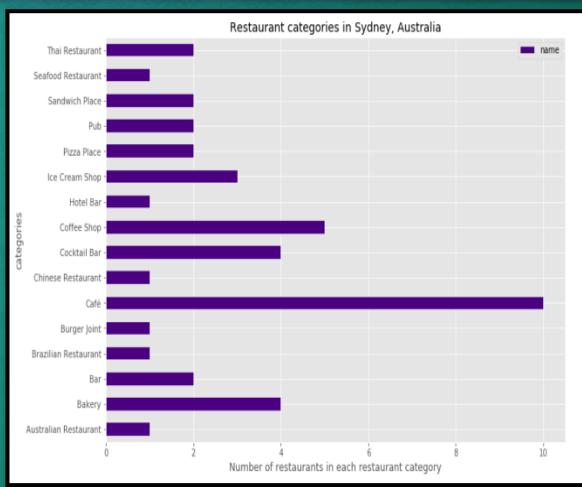


**Venue Categories in Istanbul** 

Restaurant Categories within the restaurant industry in Istanbul

#### SYDNEY VENUES

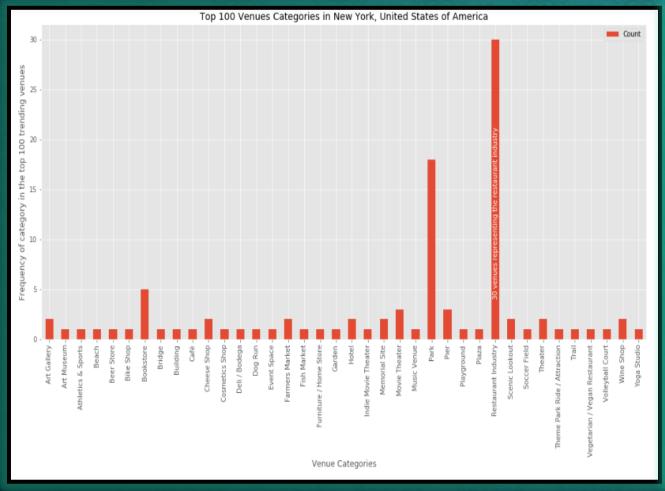


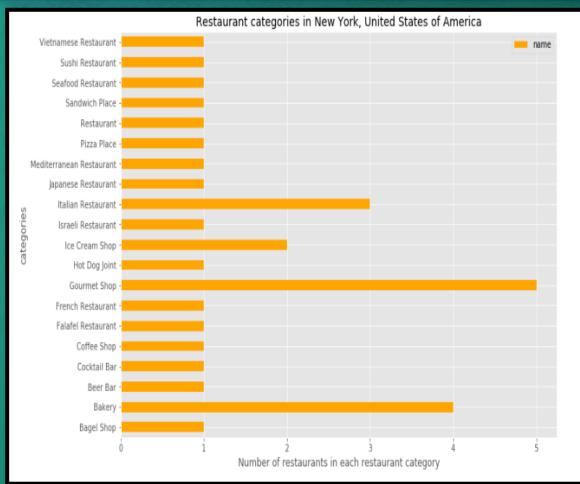


**Venue Categories in Sydney** 

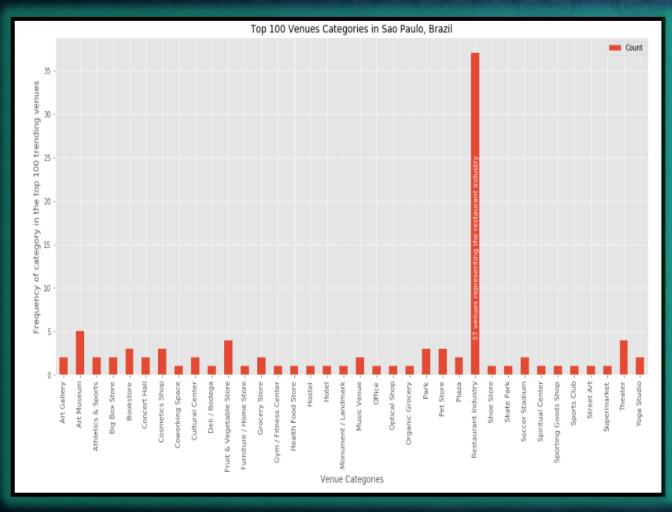
Restaurant Categories within the restaurant industry in Sydney

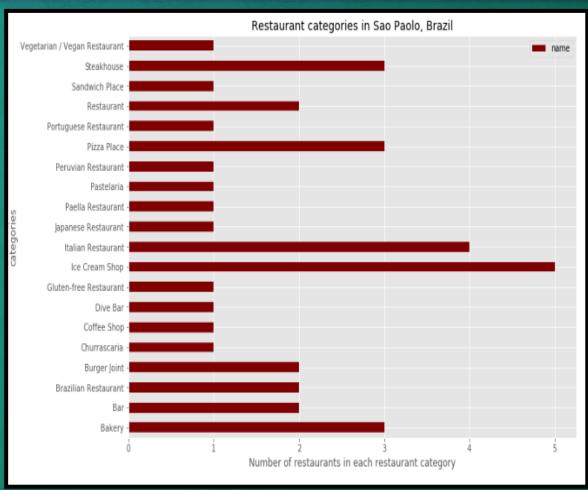
#### **NEW YORK VENUES**



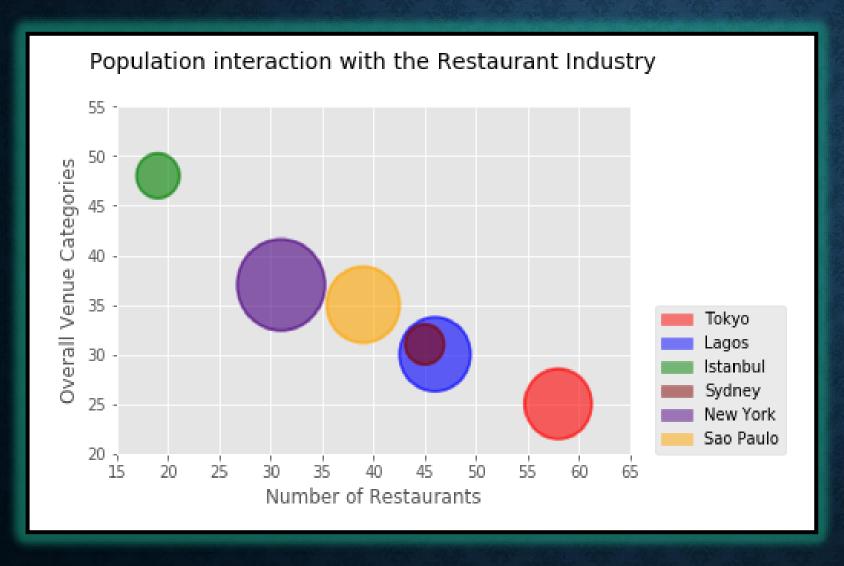


#### SAO PAULO VENUES





#### INTEGRATING POPULATION DATA



- 3 variables interact with each other to depict potential eating habits of the population of each cite.
- Keeping the area constant (i.e. the 10 km radius, it is observed that number of restaurant venues increase as the overall venue categories decrease. However the size of the population majorly affects this relationship providing more insight

Correlation of venue categories, restaurant industry and city population for all six cities

#### CONCLUSIONS AND FUTURE WORK



The most common eating habit and therefore the maximum potential for success across all continents is restaurant venue 'Pizza Place' and the most frequent restaurant venue across all six cities is the 'Ice Cream Shop'



High competition within the restaurant industry in Tokyo along with preference for local cuisine.



Eating habits of people in Istanbul do not encourage them from going out to eat. Therefore it can potentially be very difficult for a restaurant owner to set up a successful business in that area.



New York has the highest population of all the cities. Therefore even though the competition from other industries is higher compared to a city like Sydney, it will still be easier for stakeholders to get potential customers in New York. New York citizens have a very diverse palate as well.



Second highest dominance of the restaurant industry is in Lagos and Sydney. However, the vast population difference indicates that Lagos population is more prone to spend on eating and outer outdoor activities compared to the Sydney population.



a major factor overlooked in this scenario is the economics of these cities and how citizen income affects the eating habits of the population. This can provide more insight in the subject matter