

## ZOMATO – BANGALORE

200 SELECTED RESTAURANTS FOR ZOMATO COUPONS



# WHAT ARE WE GOING TO DISCUSS TODAY?

Business Objective

Understanding the Data

Approach

Final Results

Future Enhancement

# WHAT IS THE REQUIREMENT ?

- Business objective
  - Zomato wants to distribute 200 coupons to Bangalore Restaurants with the following objectives
    - Coupons are utilized within the validity
    - Zomato customer base increases
- Assumption
  - Both Dine-in and Delivery Restaurants are in scope
  - All the restaurants in datasets are open and functioning
  - Future covid restrictions are not accounted
  - All the restaurants category are equally preferred/User preference data is out of scope from this exercise

# LETS SEE OUR DATA

## Feature Set 1

Restaurant\_Name  
Category ✖  
Locality

## Feature Set 2

Pricing\_for\_2  
Dining\_Rating  
Dining\_Review\_Count  
Delivery\_Rating  
Delivery\_Rating\_Count

## Feature Set 3 ✖

Website  
Address  
Phone\_No  
Latitude  
Longitude

## Key Observation

- 5003 Restaurants
- 1.4 M Dinning Reviews
- 8.4 M Delivery Reviews
- 226 different localities

Comprehensive Data visualization has been done on these features, to find top 10 restaurants in Dinning and Delivery, to understand their relation with each other,(pricing vs rating) ( Catergory vs rating) and to various insights are noted.

## SELECTED FEATURES

### Locality Score\*

- Score the restaurants on the basis of location popularity
- BTM, Indranagar, HSR, Electronic City, Whitefield – Top 5 locality

### Popularity Score\*

- With the value available the summation of Dining and Delivery Count can be indicator of restaurant popularity

### Rating Score \*

- The average Dining and Delivery Rating of Restaurants

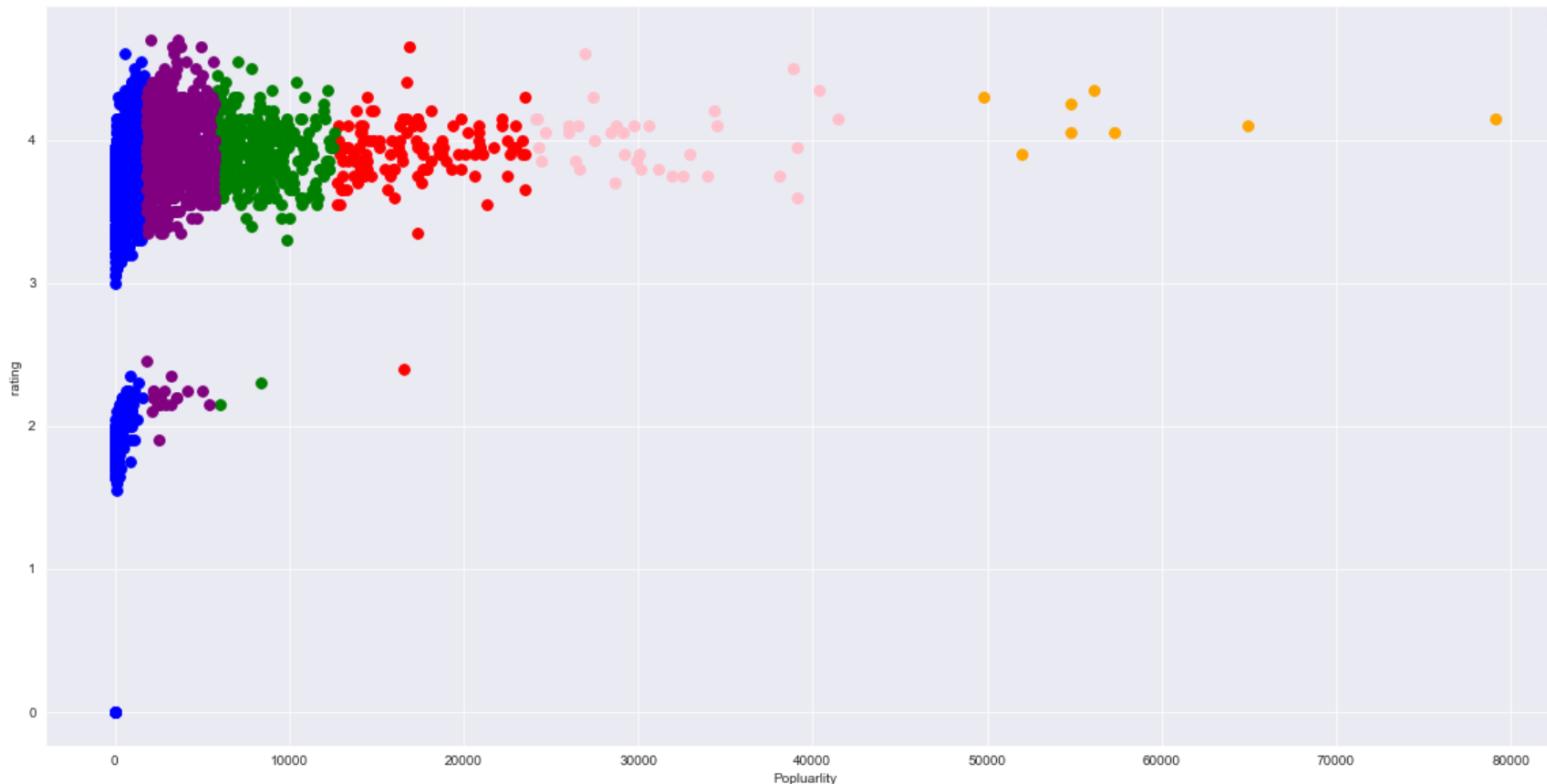
### Pricing for 2

- The total cost of food for two people

# APPROACH

- It's a Un-supervised Machine learning
- Reduced/collated the dimensions for ease of model understanding
- Level 1 Kmeans Clustering - With Poplularity and Rating
- Get the subset of restaurants as per cluters
- Level 2 Kmeans Clustering – With Pricing and Rating
- Get the subset of restaurants
- Final Kmeans Clustering – With Locality score and Rating
- Get the final list

# CLUSTER ON RATING AND POPULARITY



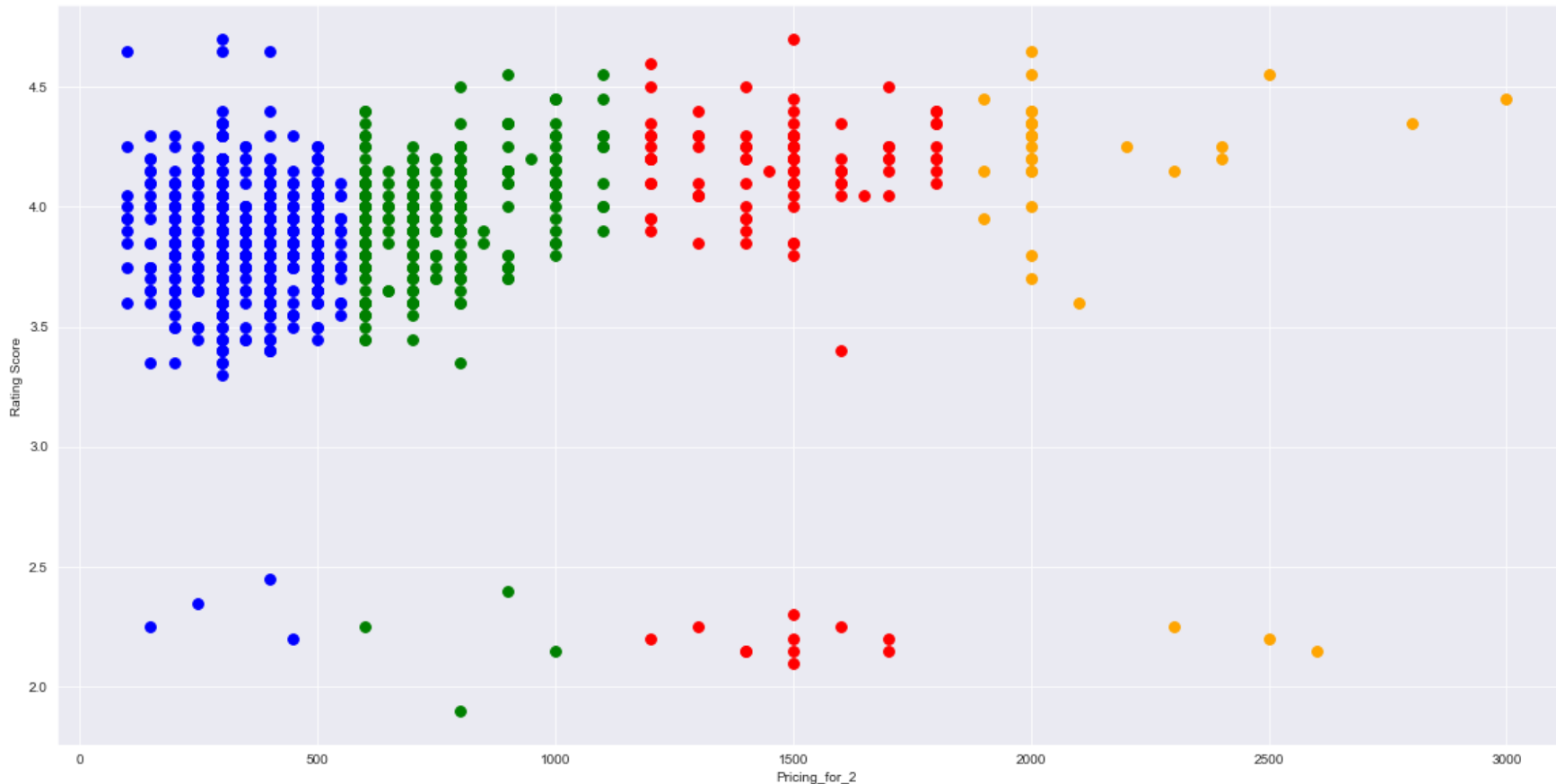
## Observation

- Purple Green and Red clusters are having better and consistent rating plus from the total number of review they look frequently visited.

## Action

- Purple, Green and Red clusters have in total – 1129 Restaurants.
- Further we will try to cluster these 1129 restaurants on different parameters

# CLUSTER ON RATING AND PRICING



## Observation

- Green and Red clusters are having better and consistent rating plus the cost is neither too low or too high

## Action

- Green and Red clusters have in total – 329 Restaurants.
- Further we will try to cluster these 329 restaurants on Locality Score



# CLUSTER ON RATING AND LOCALITY



## Observation

- Green and Red clusters are having better and they are situated in the popular location

## Action

- Green and Red cluster consist of 201 restaurants, select Top 200 as per rating to give the voucher

# SELECTED RESTAURANTS

	Pricing_for_2	Dining_Rating	Dining_Review_Count	Delivery_Rating	Delivery_Rating_Count
count	201.000000	201.000000	201.000000	201.000000	201.000000
mean	957.213930	4.156219	1497.263682	3.859701	3938.517413
std	354.556341	0.295928	1759.056769	0.532652	4502.253610
min	600.000000	3.400000	6.000000	0.000000	0.000000
25%	700.000000	4.000000	348.000000	3.800000	966.000000
50%	800.000000	4.200000	864.000000	3.900000	2350.000000
75%	1200.000000	4.400000	2249.000000	4.100000	4911.000000
max	1800.000000	4.900000	16300.000000	4.500000	20800.000000



Microsoft Excel  
Worksheet

## FURTHER ENHANCEMENTS

Multilevel clustering with all the selected parameters in one shot

Use the Latitude and Longitude for finding the Geo locations and plot them to understand the demographics

Instead of locality – use the Latitude and longitude to find the restaurants concentration

Explore the Category parameter and see if adding that can get a better list of restaurants

Next Step –

Have a mechanism to record the utilization of Zomato coupons given to selected restaurants and its impact on Zomato Market share