Analyzing Swiggy

Wireframe Documentation

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ANALYSIS:

As per the problem statement, we have defined the several Use Cases to perform the analysis on which helps in not only understanding the meaningful relationships between attributes but it also allows us to do our own research and come-up with our findings.

BASIC INFORMATION:

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 118 entries, 0 to 117
Data columns (total 8 columns):
 #   Column         Non-Null Count  Dtype
---  ------         --------------  -----
 0   Shop_Name      118 non-null    object
 1   Cuisine        118 non-null    object
 2   Rating         118 non-null    float64
 3   Average_Cost   118 non-null    float64
 4   Cost_Category  118 non-null    object
 5   Street         118 non-null    object
 6   Area           118 non-null    object
 7   Total_Cuisine  118 non-null    int64
dtypes: float64(2), int64(1), object(5)
memory usage: 7.5+ KB
```

The project analyzed the data of food delivery service provider, Swiggy, in Bangalore. The dataset used in this project was obtained from Google Drive and consisted of information about restaurants in Bangalore, their cuisines, ratings, and costs.

TOP 5 ROWS OF THE DATA:

	Shop_Name	Cuisine	Rating	Average_Cost	Cost_Category	Street	Area	Total_Cuisine
0	Kanti Sweets	Sweets	4.3	75.0	low	Koramangala	Koramangala	1
1	Mumbai Tiffin	North Indian, Home Food, Thalis, Combo	4.4	200.0	medium	Sector 5	HSR	4
2	Sri Krishna sagar	South Indian, North Indian, Fast Food, Beverag...	4.1	63.0	low	6th Block	Koramangala	5
3	Al Daaz	American, Arabian, Chinese, Desserts, Fast Foo...	4.4	200.0	medium	HSR	HSR	7
4	Beijing Bites	Chinese, Thai	4.1	225.0	medium	5th Block	Koramangala	2

The top 5 rows of the dataset were displayed using the head() function. This showed the column names and some sample data from the dataset, including the restaurant name, location, rating, cuisines, and average cost for two people.

NUMBER OF UNIQUE VALUES FOR EACH ATTRIBUTE:

```
Shop_Name        115
Cuisine           79
Rating            13
Average_Cost      30
Cost_Category      3
Street            63
Area               4
Total_Cuisine     10
dtype: int64
```

The unique values for each attribute were determined using the nunique() function. This showed the number of unique values for each attribute in the dataset, including the number of unique restaurant names, unique locations, unique cuisines, and unique ratings.

NO. OF RESTAURANTS BY COST CATEGORY:

```
Number of Restaurants by Cost Category :

Cost_Category
high      10
low       51
medium    57
Name: Shop_Name, dtype: int64
```

The No. of Restaurants for each cost category was calculated using the groupby() function. This grouped the data based on the no. of records and calculated the cost category from average cost. The output showed the No. of restaurant for each cost category in Ascending order, with the cost category and lowest No. of restaurant listed first.

AVERAGE COST PER PERSON BY AREA :

```
Area
BTM          164.542857
HSR          194.444444
Jayanagar    150.000000
Koramangala  148.914062
Name: Average_Cost, dtype: float64
```

The average cost for each was also calculated using the groupby() function. This grouped the data based on the area and calculated the average cost for each area. The output showed the average cost per person for each area in Ascending order, with the area with the lowest average cost per person listed first.

No. OF RESTAURANTS BY STREET:
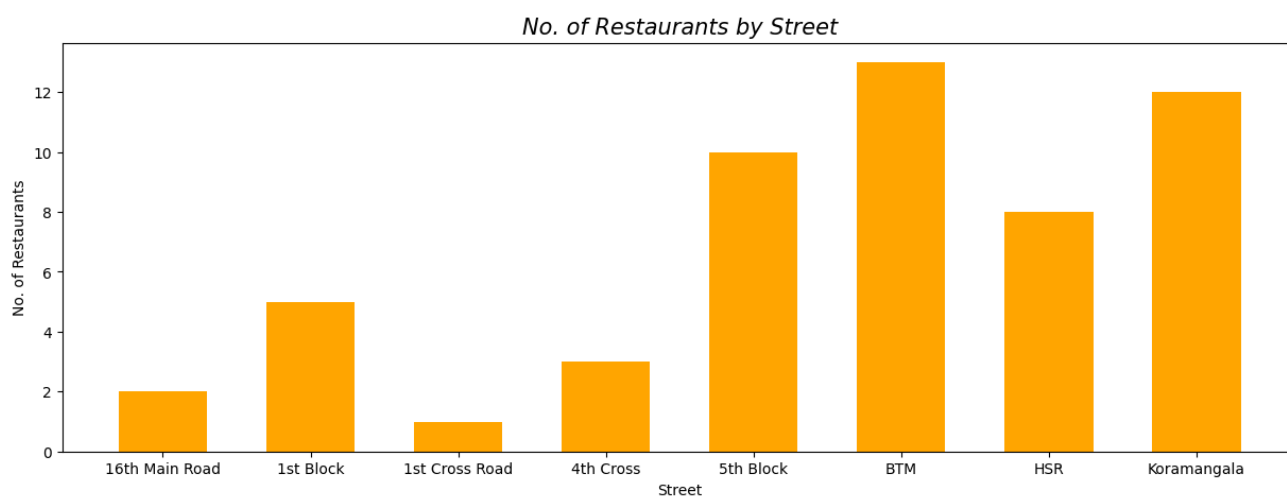
The bar graph displays the no. of restaurants for each street in Bangalore. This analysis helps to identify which streets have the highest no. of restaurants. This information can help customers make informed choices when deciding on which street.

# PIE CHART OF THE DISTRIBUTION OF RESTAURANTS BY COST CATEGORY:
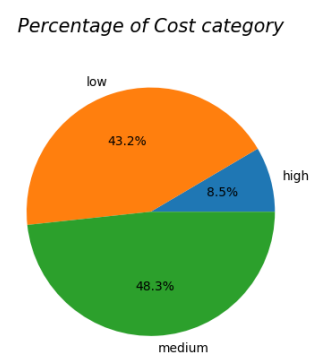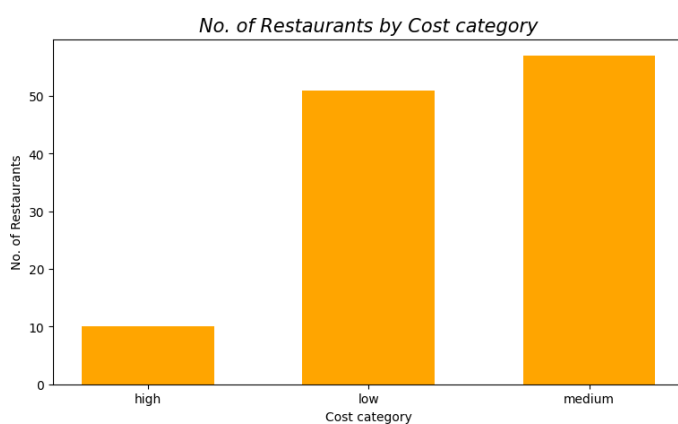
The pie chart and bar graph displays the distribution of restaurants based on their cost category. The analysis helps to identify the percentage of restaurants that fall under each cost category. This information can help customers choose restaurants based on their budget.

BAR GRAPH FOR CUISINE AVAILABLE IN NO. OF RESTAURANTS:


No. of Restaurants by Cuisine
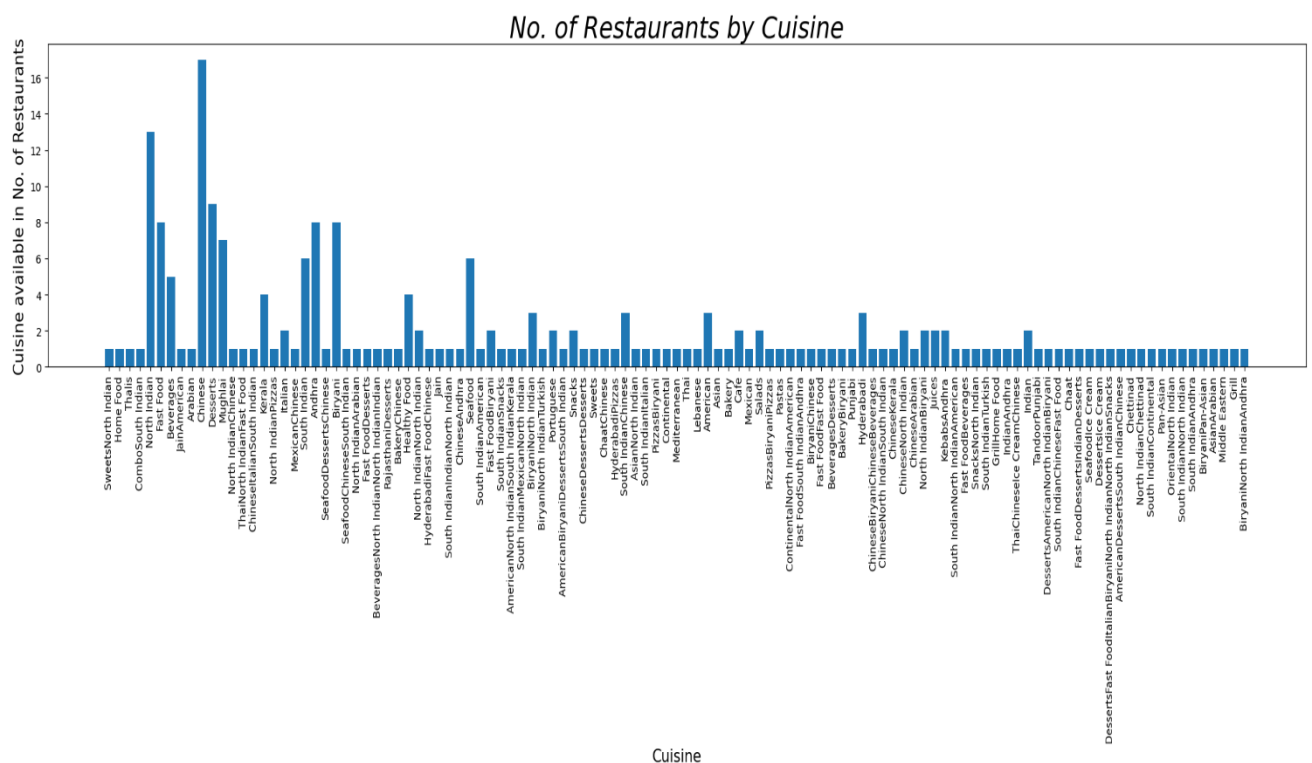
The bar graph displays the distribution of cuisines for all the restaurants in Bangalore. The analysis helps to identify the distribution of cuisines and the most common cuisine available in most restaurant.

SCATTER PLOT FOR AVERAGE COST AND TOTAL CUISINE:

Average Cost by Total Cuisine available in the restaurant
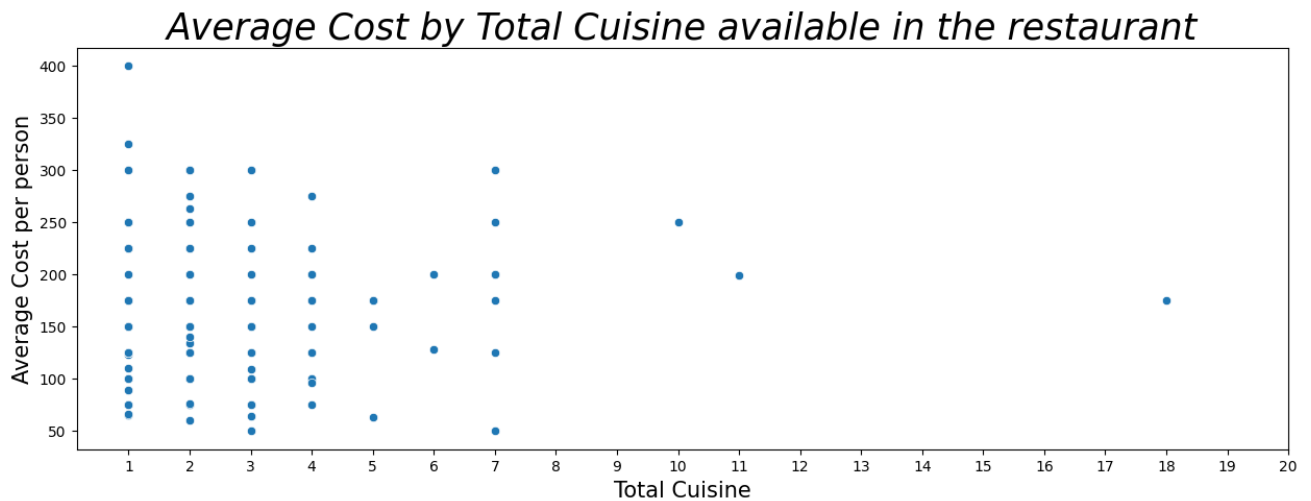
The analysis displays the number of cuisines in restaurants as Total cuisine and average cost. This information can help us identify the no. of cuisine required for restaurant and to decide their average cost.

BOX PLOT FOR AVERAGE RATING BY COST CATEGORY:
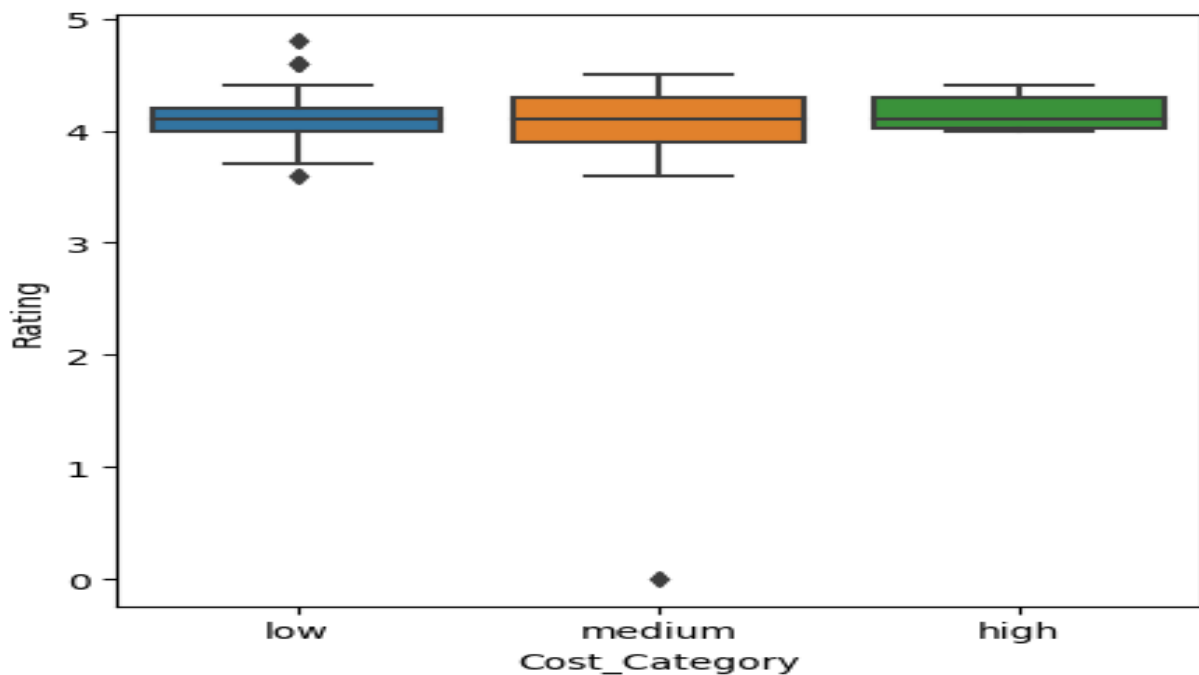
The box plot displays the average rating by cost category. This analysis helps to identify which cost category has the highest average rating and which has the lowest. This information can help customers choose restaurants based on their budget and still enjoy good ratings.

Overall, the analysis performed in the project provides useful insights for customers in Bangalore who use Swiggy for food delivery services. The information can help us make informed choices on which cuisine, restaurant, and location can be concern