# SWIGGY

# Restaurant Analysis

## Data set Provided:

To analyse the swiggy restaurants, we have a dataset of 10 columns. Each column gives us an insight about each restaurants.

Below is a description of each column:

ID and Restaurants - unique number for each restaurant and name of that restaurant

City, Area and address – This data shows where the restaurant is located.

Food Type – The type of cuisine served in the restaurant

Avg Rating – the avg rating of a restaurant

Price – The avg cost for the customer in a restaurant

Total Rating – the total number of ratings available for a restaurant

Delivery time – the Avg time taken by the restaurant to prepare and deliver food to their customers.

## Data Cleaning

The data is cleaned using excel.

There is lot of corrections in the area names and cuisine column which has been rectified using find and replace function.

Checked for null values in all the columns

## Data transformation

Created new sheet using power query for Id and food type using delimiter and arranging the values in row wise.

Created new pivot table for ID, food type, city to find the popular choice of cuisine and copy and paste the data as value

Found the correlation between various factors like avg rating, price, total rating and delivery time using correlation formula ( *correl(array1, array2)*) using excel.

## Getting deep understanding of the data

The cleaned data is been imported into power BI, where it is easy to interpret and understand he data.

Task 1

To find the top areas with most restaurant the Bar chart is used with ID in x axis and Area in Y axis.

Task 2

To find the popular food type in each city use column chart with using city in x axis and food type in y axis.

Task 3

Created a new column names as top rated for restaurants above 4.5 rating and new measure is created using the formula (*top restaurant= divide(sum[top rated]/count[avg. rating])*) and change the value to percentage and create a card to show the value.

Task 4

Correlation identified using formula in excel and value is show using card function.

Task 5

Relationship between restaurant price and avg. rating is visualized using scatter plot

Task 6

A bar chart is used in which the city is dragged to Y axis and ID to X axis to show total restaurants in each city

Task7

The price distribution is shown using Pie chart with count of ID is given in value and price is grouped using new group and dragged to legends.

Task 8

TO show avg. delivery time use card and drag the delivery time to the field and choose avg in summarization.

Task 9

To find the various types of cuisines served in each restaurants a slicer is used and food type is dragged in field type

Task 10

To find the total no. of restaurants in an Area a slicer with Area in field and card with total no. of restaurant count is created using ID ,so when the area is clicked the card shows the no. of restaurants in the area.

Task 11

To investigate the correlation the formula is used in excel between price, delivery time and total rating and value is shown in Power BI using card.

Task 12

To analyse relationship of total ratings and avg. rating a scatter plot is used

Task 13

Map is used to show the map of India and the city is dragged to the location area.

## To understand the customer insight

A bar chart has been created with most popular cuisine in each city and the total ratings gives us an insight of customers for the restaurants.

To understand the operational efficiency

A card is been created to show us the overall avg delivery time and avg delivery time for each city. This gives us an insight of cities where the operational efficiency is excellent and where it has to be improvised.

## To find the Market Positioning

In understanding the Market positioning a Bar chart is been used to find the total restaurants in each and top 10 areas with most restaurants so that it gives us a insight where the restaurants are too much crowded and areas where we can expand to new restaurants in order increase the presence geographically.

## Competition Analysis

In competition analysis the price and area where the restaurant has been located plays an vital role. This can be interpreted by using the slicer in which each area is mentioned and can be chosen to see the price distribution of restaurants in the area , cuisines offered, top rated restaurants in that area.

## Recommendations

By interpreting and understanding the data in Power BI there are certain recommendations I would like to suggest to improve the customer service even better.

Fron the data it is been clear that each city has a popular cuisine, has an initiative to increase the popularity of other cuisines in the city discounts can be awarded for other cuisines .

There are certain cities where the avg delivery time is more when compare to overall avg delivery time, this may caused by lack of manpower in the region or there is no geographical presence of restaurants in the area with various cuisines. But the avg rating is not been affected by delivery tine of the restaurants.

The most commonly rated or available cuisine in all the city is Chinese, So this shows that the most favourite cuisine for the customers is Chinese, So adding this cuisine in the menu will give an competitional advantage for the restaurants.

From the given data it is been clear that the price, delivery time and Total rating has no affect on the avg. rating of the restaurants.

It is also evident that the geographical presence of restaurants is too low in some cities so increasing the presence by adding new restaurants based on the recommendation given will increase customer base even more.