**Swiggy Analysis**

Step 1:

**Load Data**: Import the CSV file into Power BI.

**Data Cleaning** : Handle missing values finded some null values in price column. Ensure data types are correct . Remove duplicates if found.

**Create new columns:**

**Price Range:** Categorize restaurants (e.g., Low, Medium, High).

=if [price]<=100 then “low” else if [Price]<= 500 then “Medium” else “High”

**Rating Category**: Group ratings (e.g., Excellent: 4.5-5, Good: 4-4.4, Average: 3-3.9, Poor: below 3).

if [Rating] >= 4.5 then "Excellent" else if [Rating] >= 4 and [Rating] < 4.5 then "Good" else if [Rating] >= 3 and [Rating] < 4 then "Average" else "Poor"

**Data modelling:**

Use calculated columns and measures for aggregated analysis (e.g., average delivery time by area).

AvgDeliveryTime = AVERAGE('swiggy.csv'[DeliveryTimeHours])

AvgDeliveryTimeByArea = AVERAGEX( SUMMARIZE( 'swiggy.csv', 'swiggy.csv'[Area], "AvgTime", AVERAGE('swiggy.csv'[DeliveryTimeHours]) ), [AvgTime] )

**Split data in column:**

Food type column data is splited.

**Dashboard Design:**

Used bar chart, pie chart, donut chart, scatter chart ,and some slicers etc.

**Task List:**

**Task 1: Top 10 Areas with Most Restaurants:**

Used dax formula for group by for count restaurants by area

Click on **Modeling** > **New Column**.

RestaurantCountPerArea =

CALCULATE(

   COUNTROWS('swiggy csv'),

   ALLEXCEPT('swiggy csv', 'swiggy csv'[Area])

)

Used this code for measure’

Used bar chart for result and filters

**Task 2: Most Popular Food Types Served by Swiggy Restaurants in Each City:**

Inserted Stacked Bar Chart with food type and restaurantcountperarea .

Also inserted table and slicer of food type for data clear view.

**Task 3: Top Rated Swiggy Restaurants (In Percentage)**

Create a Calculated Column for Top Rated Restaurants

To classify restaurants as "Top Rated" or "Not Top Rated":

TopRatedRest =

IF('swiggy csv'[Avg ratings] > 4.5, "Top Rated", "Not Top Rated")

Create a measure to count all restaurants

Create another measure to count only "Top Rated" restaurants

Create a measure for the percentage

Add a **Card Visual** to display the overall percentage of top-rated restaurants.

Add a **Pie Chart** **Axis**: TopRatedrest **Values**: Count of restaurants.

**Task 4: Correlation of Factors Affecting Average Rating**

**Scatter Chart** icon from the Visualizations pane is used **X-Axis**: Choose the independent variable Price

**Y-Axis**: Set Average Rating.

**Size**:Total Ratings

**Legend**: Use categories like City

Create Measures for Covariance and Correlation.

**Task 5: Correlation Between Restaurant Price and Average Rating**

Create a Scatter Plot:

**X-Axis**: Price

**Y-Axis**: Average Rating

**Size**:Total Ratings

**Legend**:City

Covariance and correlation between Price and Rating

**Task 6: City-wise Restaurant Count**

create a new visual Column Chart

**Axis**: City

**Values**: Count of Restaurant ID

Created a new column of count of restaurant using dax

**Task 7: Price Analysis**:

**Histogram**: This is the best way to analyse price distribution. selected the **Clustered Column Chart** **Set** the Fields: **Axis**: Use **Price** (you might need to create bins if using a histogram)Values: Set this to count the number of restaurants **Restaurant ID.**In the column chart, replace the **Price** axis with the new **Price Bins** column.

**Task 8: Delivery Time Analysis**

Bar Chart: **Axis**: Selected the dimension you want to analyse, such as restaurant

**Values**: Drag the **Delivery Time** column and set it to display the **Average** use the dropdown to change from Count to Average

**Task 9: Cuisine Analysis**

Create a New Table for Unique Cuisines by using dax

Add Count Column using dax cuisinescount and food type

Pie Chart: **Axis**: Use the food typecolumn from the UniqueCuisines table **Values**: Use the CuisineCount measure you created.

**Task10: Area-wise Restaurant Analysis:**

Create a new table with each area and the corresponding count of restaurants.

Table name :Areasummary, column contain Area, city, number of Restaurants,

Choose a Bar Chart Axis: Drag the Area column from the AreaSummary table to the Axis

area. Values: Drag the Number of Restaurants column to the Values area.

**Task 11: Correlation Analysis:**

Use DAX formulas to calculate correlation coefficients:

Correlation between Average Rating and Price

Correlation between Average Rating and Delivery Time

Correlation between Price and Delivery Time

Find the value showed in chart

**Task 12: Customer Feedback Analysis:**

Measure Percentage of Each Rating Category Excellent,Good,Average,poor and Average Total Reviews

Insert a **Pie Chart** Axis: Rating Category. Values: Count of Rating Category.

**Task 13: Geographical Mapping:**

select a Map Visual:

Drag **City**, **Area**, into the **Location** field.

Add a measure like the **Number of Restaurants** to represent the size of bubbles.

**Task 14: Business Recommendations:**

**Customer Insights**: Focus on High-Demand Cuisines, Leverage Customer Feedback,Personalized Marketing

**Operational Efficiency:** Optimize Delivery Logistics, Partner with More Restaurants, Monitor and Improve Delivery Time

**Market Positioning:** Expand in Underserved Areas, Strengthen Competitive Regions

**Price and Rating Correlation:** Promote Mid-Priced Restaurant, Dynamic Pricing Strategy

**Cuisine Analysis:** Encourage Diversity, Highlight Top Cuisines

**Customer Feedback and Ratings:** Recognize and Reward Excellence, Support Low-Performing Restaurants

**Strategic Growth:** Target Growth Markets, Invest in Technology

**Promotional Campaigns:** Boost New Restaurants, Highlight Popular Restaurants

**Data-Driven Decisions:** Leverage Dashboard Insights

**Continuous Improvement**

* Conduct quarterly reviews using updated datasets to refine recommendations.
* Use customer feedback from reviews to adapt strategies dynamically.