

# Zomato Worldwide Restaurants Analysis

## Step 1: Data Import and Transformation

### 1. Load Data:

- Open **Power BI** and click on **Get Data** to import Zomato data.
- Once imported, examine the dataset to understand its structure.

### 2. Data Cleaning:

- Go to **Transform Data** to clean and organize your data.
- Remove duplicates to avoid over-counting restaurants.
- Handle nulls by filling in missing values.

### 3. Data Transformation:

- Use Power BI's data transformation tools to:
  - Check the data type of the column and change it.

### 4. Data processing:

- Create a new column using the **DAX Formula**:
  - Go to the **Table view**.
  - In the **Modelling tab**, click on **New Column**.
  - Use a DAX formula to the country codes to country names:

```
CountryName =  
SWITCH(  
    TRUE(),  
    ZomatoData[CountryCode] = 1, "India",  
    ZomatoData[CountryCode] = 14, "Australia",  
    ZomatoData[CountryCode] = 30, "Brazil",  
    ZomatoData[CountryCode] = 37, "Canada",  
    ZomatoData[CountryCode] = 94, "Indonesia",  
    ZomatoData[CountryCode] = 148, "New Zealand",  
    ZomatoData[CountryCode] = 162, "Philippines",  
    ZomatoData[CountryCode] = 166, "Qatar",  
    ZomatoData[CountryCode] = 184, "Singapore",  
    ZomatoData[CountryCode] = 189, "South Africa",
```

```
ZomatoData[CountryCode] = 191, "Sri Lanka",  
ZomatoData[CountryCode] = 208, "Turkiye",  
ZomatoData[CountryCode] = 214, "The United Arab Emirates",  
ZomatoData[CountryCode] = 215, "United Kingdom",  
ZomatoData[CountryCode] = 216, "United States"  
)
```

## Step 2: Create Visuals for the Dashboard

### 1. Key Metrics (Card/KPI Visuals):

- Display essential metrics at a glance, like the total number of restaurants, average rating, and unique cuisines.
- Using **Slicer Filters** for specific Cities, Rating, Online Delivery, Price Range:
- Using a **Card** for visualization of the number of Restaurants, Number of Cities, and Number of Countries to display each metric:
  - **Total number of restaurants: 9551**
  - **Total numbers of City: 141**
  - **Total Number of Country: 15**

### 2. Top Cities by Restaurant Count (Bar Chart):

- Highlight the countries or cities with the highest concentration of restaurants.
- Cities with the highest restaurant counts include:
  - **New Delhi**: 5.5K restaurants, representing the largest concentration.
  - **Gurgaon** and **Noida** also have high counts (1.1K each).
- This insight helps identify key restaurant hubs within the Zomato network, especially in Indian cities.

### 3. Online vs. Offline Delivery Availability (Pie Chart):

- Show the share of popular cuisines offered across all restaurants.
- A segmented visualization shows that:
  - **74.29%** of restaurants **offline** delivery.
  - **25.65%** provide **online** delivery.

### 4. Top Restaurants by Rating and Cost for Two (Matrix Chart):

- A table lists the highest-rated restaurants with their average cost for two:
  - Examples include **Sushi Masa** (average cost: 500,000), **Talaga Sampireun** (200,000), and **Spiral - Sofitel** (6,000).

- These restaurants have consistently high ratings of **4.90**, indicating premium, top-rated options in the Zomato database.

## 5. Votes by Price Range Analysis (Donut Chart):

- These visual displays the distribution of customer votes across four price ranges:
  - **Price Range 3** has the highest votes, with **41.71%** of votes.
  - **Price Range 4** follows, with **30.65%** and **Price Range 2** with **14.4%** respectively.

## 6. Map Visualization:

- Display the geographic distribution of restaurants worldwide.
- A **Power BI map visual** appears to provide an overview of restaurant locations globally, likely representing data density by city or country.
- Clicking on specific countries or cities would offer more localized data, making it interactive and easy to explore regional distribution.

This dashboard offers valuable insights into the distribution of restaurants, delivery availability, and user engagement by price, providing a comprehensive view of Zomato's global restaurant data.



