

Data Analyst Capstone Project - Marketing (Excel + Tableau)

Tools Used:

- Microsoft Excel (for Data Cleaning, Preparation, Basic Analysis)
- Tableau (for Visualization and Dashboarding)

1. Data Preparation in Excel

Step 1: Load and Merge Datasets

- Import `data.xlsx_marketing.xlsx` and `Country-Code.xlsx_marketing.xlsx`.
- Use VLOOKUP or Power Query to merge on `Country Code` to bring in `Country Name`.

Step 2: Data Cleaning

- Remove duplicate rows.
- Handle missing values in `Cuisines`, `Aggregate rating`, `Votes`, etc.
- Standardize Yes/No values in `Has Table booking` and `Has Online delivery`.
- Convert categorical fields into readable format (e.g., 1 = Yes, 0 = No).

Step 3: Feature Engineering

- Add a column `Cuisine Count` = COUNT of cuisines by splitting the `Cuisines` column using delimiter ",".
- Create a new column `Star Restaurant` where:
 `=IF(AND([Aggregate rating]>=4.2,[Votes]>=100), "Yes", "No")`

Step 4: Save Cleaned Data

- Export the final cleaned data to `cleaned_data.xlsx` for Tableau use.

2. Visualization in Tableau

Step 1: Load Data

- Connect Tableau to `cleaned_data.xlsx`.

Step 2: Create Visuals

Scatter Plot - Votes vs Aggregate Rating

- X-Axis: Votes
- Y-Axis: Aggregate Rating
- Size: Cuisine Count
- Color: Price Range
- Tooltip: Restaurant Name
- Insight: Identify star restaurants in the top-right

Highlight Table - Top 10 Star Restaurants

- Apply Filters: Votes >= 100, Rating >= 4.2
- Columns: Restaurant Name, City, Rating, Votes, Price Range, Cuisine Count, Delivery, Table Booking
- Sort by: Aggregate Rating (descending)
- Use color shading for highlight effect

Bar Charts

- Price Range vs Average Rating
- Online Delivery vs Average Rating
- Table Booking vs Average Rating

Heatmap

- Cuisine vs City with Average Rating

Step 3: Dashboard

- Combine all visuals into one dashboard.
- Add filters (Country, City, Price Range).
- Highlight KPIs: Total Votes, Avg Rating, Total Star Restaurants.

Step 4: Publish or Export

- Save and export the dashboard as PDF or publish to Tableau Public.