



Project 1: Data Manipulation and Reporting with Power BI.

Objectives

To construct a consolidated and interactive Power BI report that will allow Zomato to quickly assess the required data.



Industry Relevance



- How to construct a consolidated and interactive Power BI: It enables evaluating each data set by connecting them, and it also helps in analyzing the findings in the form of charts or graphs.
- Understand DAX and its application: It is a set of functions and algorithms that create computed columns, measures, and custom tables in Microsoft Power BI.

Description



Examine the data in such a way that Zomato can accurately assess their business performance.

Note:

Steps to use DAX in the project:

- Add a Rating color column in an appropriate table with the data rows in the format given below-

Aggregate rating	Rating color
Above 4.5	Dark Green
4 to 4.4	Green

- Create the following measures in the appropriate tables-
 - a. Restaurant count
 - b. Average cost
 - c. Average rating
 - d. Cuisine count
- Create a new column in the Country Code table and name it "Continent" and create the values using the below-mentioned convention-
 - The mapping is continent - country, for example "Africa – South Africa".

Problem Statement and Motivation



Zomato is a restaurant aggregation and meal delivery service based in India. It is currently operating in several countries across the world. Zomato provides thorough information about numerous eateries as well as consumer reviews. Zomato's owners aim to find hidden irregularities in their company's data.

The data (sample) is currently accessible in the form of a few Excel files, each of which contains information about multiple restaurants operating in a certain continent.

What is the motivation to do this?

The clients want to construct a consolidated and interactive Power BI report that will allow them to do the following:

- Derive data on the total number of restaurants worldwide, including continents, countries, and cities.
- View data on a global scale with the capacity to drill down to a granular level.
- Derive data on the restaurants with the highest average customer ratings.
- Discover the restaurants with the lowest average costs.

Problem Statement and Motivation



- Filter and view information on the restaurants based on:
 - Their geographical dimensions such as continent, country, and city.
 - The service they provide, such as online ordering or reservation services.
 - The average rating slab by color.
- Identify the restaurants with the most cuisines served.
- Design a multi-page report that suits Zomato's theme with easy navigation across sections.
- Allow Zomato users to be able to access this information from both a web browser and a mobile device.

Task



1. Import the data from all available excel files.
2. Transform data.
3. Remove any columns that aren't being used.
4. Create two columns to display the restaurant name and restaurant address.
5. Make a separate table for the list of the cuisines that each restaurant serves.
6. As it's a dimension table, the country-code table must only include unique and non-blank values.

Project Reference



To get a better clarity refer:

- Task 1 –Import data- Section 1, Lesson 2
- Task 2 – Data Transformation- Section 3, Lesson 4
- Task 3 – Removing unnecessary columns- Section 1, Lesson 7

Data Sets/Materials

Link to the Dataset:

<https://github.com/Simplilearn-Edu/Power-BI-Datasets.git>



Thank You