



zomato

Introduction to Zomato



Zomato is a leading global restaurant discovery and food delivery platform, connecting people to a wide variety of dining experiences. With a presence in over 24 countries, Zomato empowers food lovers to explore and order from a vast network of restaurants at their fingertips.

High Level Business Requirement

Zomato is a restaurant search and discovery service. Operating in several countries worldwide, they provide detailed information and customer reviews of various restaurants.

The owners of Zomato, want to understand the hidden anomalies in their business data.

The final objective of this project is to analyze the data in a way which helps them to accurately judge their business performance.











High Level Steps

To achieve the above-mentioned requirements, following are some of the high-level steps that need to be performed.

Step 1.

Data Import:

1) Import data from all the available Excel files

Name	
	Africa
	Asia
	Country-Code
	Europe
	Fact Table
	NAM
	Oceania
	SAM



Step 2. Created a Custom Column for all Continent Tables

Power BI Desktop interface showing the 'Custom Column' dialog box. The dialog is titled 'Custom Column' and contains the text 'Add a column that is computed from the other columns.' Below this, there is a 'New column name' field with 'Continent' entered. The 'Custom column formula' field contains '= "Asia"'. To the right of the formula field is a list of 'Available columns' including Restaurant ID, Country Code, City, Restaurant Name,Address, Locality, Locality Verbose, and Longitude. At the bottom of the dialog, it says 'No syntax errors have been detected.' and has 'OK' and 'Cancel' buttons.

The background shows the Power BI interface with a table of restaurant data. The table has columns: Restaurant ID, Country Code, City, Restaurant Name,Address, Locality. The data is filtered by 'Continent' = 'Asia'.

Query Settings

PROPERTIES

Name
Zomato Asia

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Added Continent Column
- Changed Type1
- Reordered Columns

Restaurant ID	Country Code	City	Restaurant Name,Address	Locality
6317637	162	Santa Rosa	Care Arabelle,Ayala Mall, Solenad, Nuvali, Santa Rosa - Tagaytay Road, ...	Nuvali, Don Jose, Santa Ro
6304287	162	Santa Rosa	Nonna's Pasta & Pizzeria,Ground Floor, Building G, Solenad 3, Nuvali, ...	Solenad 3, Don Jose, Santa
6300002	162	Tagaytay City	Balay Dako,Aguinaldo Highway, Tagaytay City	Tagaytay City



Step 3. I append all Continent Tables as a new table called as : All continent combined data

Append

Concatenate rows from three or more tables into a single table.

☐ Two tables ☒ Three or more tables

Available tables

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato SAM
- Zomato Oceania
- All Continent Combined Data
- Cuisines Table

Tables to append

- All Continent Combined Data
- Zomato Africa
- Zomato Asia
- Zomato Europe
- Zomato NAM
- Zomato SAM
- Zomato Oceania

Add >>

OK **Cancel**

Continent	Restaurant ID	Country Code	City	Restaurant Name	Restaurant Address
Valid	100%	Valid	100%	Valid	100%
Error	0%	Error	0%	Error	0%
Empty	0%	Empty	0%	Empty	0%
2 distinct, 1 unique					
1 North America					
2 South America					
3 South America					
4 South America					
5 South America					
6 South America					
7 South America					
8 South America					
9 South America					
10 South America					
11 South America					
12 South America					
13 South America					
14 South America					
15 South America					
16 South America					
17 South America					
18 South America	6601158	30	Brasilia	Manzuic	Pontifco Lago Sul, SHIS 10, Lote 9,
19 South America	6600427	30	Brasilia	Coco Bambu	SCES, Trecho 2, Conjunto 13/36, S

Step 4. Data Transformations

- 1) Some of the values in the “City” column, mentioned below, needs to be corrected.
 - a. The word “city” needs to be taken off from every city name (wherever appears).
 - b. “São Paulo” should be corrected to “São Paulo”.
 - c. “Cedar Rapids/Iowa City” should be corrected to “Cedar Rapids”.
 - d. “İstanbul” should be corrected to “Istanbul”.
- 2) Remove the columns which are not used.
- 3) Make separate columns to show the “Restaurant Name” and the “Restaurant Address”.
- 4) Create a separate table from where you get the list of cuisines served by each restaurant.
- 5) The “Country-Code” table must contain only unique and non-blank values (as it’s a dimension table).

The screenshot displays the Microsoft Power Query Editor interface. The main window shows a table with columns: Continent, Restaurant ID, Country Code, City, Restaurant Name, and Address. The 'City' column is selected, and a 'Replace Values' dialog box is open. The dialog shows a list of cities to be replaced, including 'Cedar Rapids/Iowa City', 'São Paulo', and 'İstanbul'. The 'Replace With' field is set to 'Cedar Rapids'. The 'City' column is also shown with a 'Sort Ascending' filter applied. The 'Restaurant Name' and 'Address' columns are also visible. The 'Query Settings' pane on the right shows the 'Applied Steps' list, which includes 'Replaced Value City from city ...'. The 'Properties' pane on the right shows the 'Name' of the query as 'All Continent Combined Data'.

Continent	Restaurant ID	Country Code	City	Restaurant Name	Address
Africa	1	18395			
Africa	2	18397			
Africa	3	6402			
Africa	4	6402			
Africa	5	6400			
Africa	6	6402			
Africa	7	6402			
Africa	8	6402			
Africa	9	6403			
Africa	10	6403			
Africa	11	6400			
Africa	12	6404			
Africa	13	6402			
Africa	14	6400			
Africa	15	6403			
Africa	16	6403			
Africa	17	6402			
Africa	18	6402			
Africa	19	6400			
Africa	20	6400			
Africa	21	6502			

Step 4. Data Transformations

3) Make separate columns to show the “Restaurant Name” and the “Restaurant Address”.

4) Create a separate table from where you get the list of cuisines served by each restaurant.

5) The “Country-Code” table must contain only unique and non-blank values (as it’s a dimension table).

The screenshot shows the Microsoft Power BI Desktop interface. The main window displays a table with the following columns: Country Code, Restaurant Name, Restaurant Address, and Locality. The table is filtered by 'All Continent Combined Data'. The 'Country Code' column has a unique value count of 1. The 'Restaurant Name' column has 20 distinct values. The 'Restaurant Address' column has 21 distinct values. The 'Locality' column has 11 distinct values. A 'Split Column by Delimiter' dialog box is open, showing the 'City' column selected and the delimiter set to 'Comma'. The 'Query Settings' pane on the right shows the 'Applied Steps' for the 'City' query, including 'Split Column by Delimiter' and 'Renamed Columns'.

Country Code	Restaurant Name	Restaurant Address	Locality
1	37	Chatham Kent	Chatham-Kent, ON N7M2V2
2	30	Brasilia	Chatham-Kent
3	30	Brasilia	Chatham-Kent
4	30	Brasilia	Chatham-Kent
5	30	Brasilia	Chatham-Kent
6	30	Brasilia	Chatham-Kent
7	30	Brasilia	Chatham-Kent
8	30	Brasilia	Chatham-Kent
9	30	Brasilia	Chatham-Kent
10	30	Brasilia	Chatham-Kent
11	30	Brasilia	Chatham-Kent
12	30	Brasilia	Chatham-Kent
13	30	Brasilia	Chatham-Kent
14	30	Brasilia	Chatham-Kent
15	30	Brasilia	Chatham-Kent
16	30	Brasilia	Chatham-Kent
17	30	Brasilia	Chatham-Kent
18	30	Brasilia	Chatham-Kent
19	30	Brasilia	Chatham-Kent
20	30	Brasilia	Chatham-Kent
21	30	Brasilia	Chatham-Kent

Step 4. Data Transformations

4) Create a separate table from where you get the list of cuisines served by each restaurant.

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Choose Remove Columns Keep Remove Rows Sort Split Column Group By Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Text Analytics Vision Azure Machine Learning AI Insights

Queries [10]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato SAM
- Zomato Oceania
- All Continent Combined Data
- Cuisines Table**

Table.SelectColumns(*Renamed Columns*,{"Restaurant ID", "Cuisines", "Continent"})

Restaurant ID Cuisines Continent

Valid 100% Valid 100% Valid 100%

Error 0% Error 0% Error 0%

Empty 0% Empty 0% Empty 0%

21 distinct, 21 unique 17 distinct, 13 unique 2 distinct, 1 unique

Restaurant ID	Cuisines	Continent
16659169	Japanese, Sushi	North America
6600681	Fast Food, French	South America
6601005	Cafe	South America
6600292	Bakery	South America
6600441	Brazilian	South America
6600970	Pizza	South America
6600379	Japanese	South America
6600214	Arabian	South America
6601218	Japanese	South America
6600060	Brazilian, Cafe	South America
6600083	Italian	South America
6601515	Pizza	South America
6601361	Bar Food, Brazilian	South America
6601602	Mexican, Grill	South America
6601589	International	South America
6601862	Peruvian, Latin American	South America
6601595	American, Grill	South America
6601158	Seafood	South America
6600427	International	South America
6600116	Italian	South America
6601457	American, Burger	South America

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter

Split at

Left-most delimiter

Right-most delimiter

Each occurrence of the delimiter

Advanced options

Quote Character

Split using special characters

Insert special character

OK Cancel

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Choose Remove Columns Keep Remove Rows Sort Split Column

Queries [10]

- Zomato Africa
- Zomato Asia
- Country Master
- Zomato Europe
- KPIs
- Zomato NAM
- Zomato SAM
- Zomato Oceania
- All Continent Combined Data
- Cuisines Table**

Table.SelectColumns(*Renamed Columns*,{"Restaurant ID", "Cuisines", "Continent"})

Restaurant ID Cuisines Continent

Valid 100% Valid 100% Valid 100%

Error 0% Error 0% Error 0%

Empty 0% Empty 0% Empty 0%

21 distinct, 21 unique 17 distinct, 13 unique 2 distinct, 1 unique

Restaurant ID	Cuisines	Continent
16659169	Japanese, Sushi	North America
6600681	Fast Food, French	South America
6601005	Cafe	South America
6600292	Bakery	South America
6600441	Brazilian	South America
6600970	Pizza	South America
6600379	Japanese	South America
6600214	Arabian	South America
6601218	Japanese	South America
6600060	Brazilian, Cafe	South America
6600083	Italian	South America
6601515	Pizza	South America
6601361	Bar Food, Brazilian	South America
6601602	Mexican, Grill	South America
6601589	International	South America
6601862	Peruvian, Latin American	South America
6601595	American, Grill	South America
6601158	Seafood	South America
6600427	International	South America
6600116	Italian	South America
6601457	American, Burger	South America

3 COLUMNS, 21 ROWS Column profiling based on top 1000 rows



Step 4. Data Transformations

4) Create a separate table from where you get the list of cuisines served by each restaurant.

File Home Transform Add Column View Tools Help

Group By Use First Row as Headers Count Rows Table

Transpose Reverse Rows Count Rows

Data Type: Whole Number Detect Data Type Rename

Replace Values Fill Pivot Column

Unpivot Columns Move Convert to List

Split Column Format Merge Columns Extract Parse

Queries [10]

- Zomato Africa
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2 distinct, 0 unique

388 distinct, 91 unique

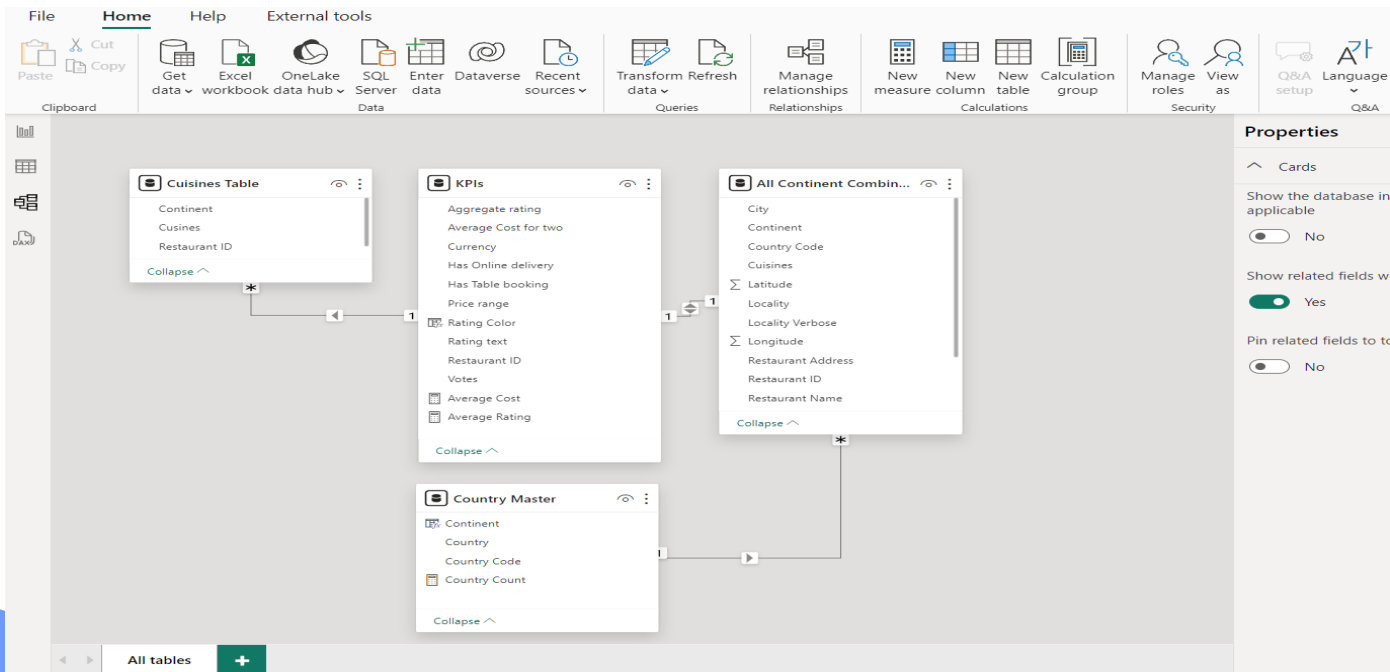
122 distinct, 39 unique

	Continent	Restaurant ID	Value
1	Africa	18395463	Pizza
2	Africa	18395463	Grill
3	Africa	18337845	Cafe
4	Africa	18337845	Patisserie
5	Africa	6401732	Spanish
6	Africa	6401732	Tapas
7	Africa	6401060	Cafe
8	Africa	6401060	Bakery
9	Africa	6400421	Cafe
10	Africa	6402177	Japanese
11	Africa	6402177	Sushi
12	Africa	6402177	Asian
13	Africa	6401198	Cafe
14	Africa	6401198	Bakery
15	Africa	6401198	Tea
16	Africa	6401198	Vegetarian

6400421

Step 5. Data Modelling

- 1) Model your data according to the reporting requirements.
- 2) While creating relationships, choose the appropriate “Cardinality” and the “Cross filter direction” so that the aggregations can happen accurately at the report level.



Step 6. Using DAX Created Measures

1) There needs to be a “Rating Color” column in an appropriate table. The data rows should follow the below mentioned convention.

Aggregate rating	Rating color
Above 4.5	Dark Green
4 to 4.4	Green
3.5 to 3.9	Yellow
2.5 to 3.4	Orange
1.8 to 2.4	Red
0 to 1.7	White

2) Create following measures in appropriate tables.

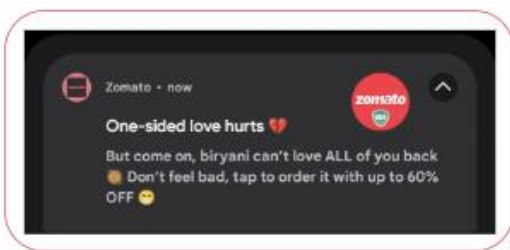
- a. Restaurant Count
- b. Average Cost
- c. Average Rating
- d. Cuisine Count

4) Wherever needed, lookup the continent column from the “Country Code” table.

3) Create a new column called “Continent” in the “Country Code” table. Create the values using the below mentioned convention.

Note: The Country and Continent mapping is as follows. Please use this convention wherever needed.

- a. Africa – South Africa
- b. Asia – Philippines
- c. Asia – Singapore
- d. Asia – UAE
- e. Asia – India
- f. Asia – Indonesia
- g. Asia – Qatar
- h. Asia – Sri Lanka
- i. Asia – Turkey
- j. Europe – United Kingdom
- k. North America – United States
- l. North America – Canada
- m. Oceania – Australia
- n. Oceania – New Zealand
- o. South America – Brazil



KPIs



Cuisines



Maps



About

