Zomato Restaurant Analysis – Power BI Project Report (with Example-based Analysis)

Project Objective

The objective of this project was to build a **consolidated and interactive Power BI report** for Zomato that enables users to analyze restaurant data across continents, countries, and cities. The report supports **global-level insights as well as city-level detailed analysis**, with filtering options and easy navigation, accessible on web and mobile devices.

Data Used

The report is built using multiple Excel files provided for different regions:

- Africa, Asia, Europe, North America, South America, Oceania
- Country Code table
- Fact table containing restaurant details such as ratings, cost, cuisines, location, and services

All files were imported and consolidated into Power BI.

Data Preparation & Modeling

- City names were cleaned and standardized.
- Unused columns were removed.
- Restaurant Name and Address were separated into individual fields.

- A separate cuisine structure was created to calculate cuisine count.
- A proper data model was created with fact and dimension tables.
- A **geographical hierarchy (Continent → Country → City)** was created to enable drill-down analysis.

Measures Created

The following measures were created using DAX:

- Restaurant Count
- Average Rating
- Average Cost for Two
- Cuisine Count

These measures dynamically respond to user selections.

Analysis & Outputs (Mapped to Client Requirements)

1. Total Number of Restaurants

The dashboard displays the **total restaurant count (9,551)** using a KPI card.
Using the map visual, users can view restaurant distribution across continents and drill down to countries and cities.

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2. Global to Granular Analysis (Example)

From the global map, when the user selects **Asia → India → Pune**:

- The tooltip shows:

    - Continent: Asia
    - Country: India
    - City: Pune
    - Restaurant Count: 20
- All KPIs (Restaurant Count, Average Rating, Average Cost for Two) update automatically.
- The chart below displays **top restaurants in Pune** based on average rating.

This confirms that the report supports **global view with granular city-level analysis**.

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3. Top Performing Restaurants by Average Rating

The visual **"Average Rating by Restaurant"** displays the top restaurants based on customer ratings.
For example, when **Bangalore** is selected:

- Restaurants like *Big Brewsky* and *ECHOES Koramangala* appear with high ratings.
- The **Average Rating gauge shows 4.70** for the selected restaurant.

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4. Top Performing Restaurants by Least Average Cost

The **Average Cost for Two** KPI and gauge display cost-related performance.
For example, when **Big Brewsky (Bangalore)** is selected:

- Average Cost for Two = **950**
  This helps identify restaurants offering good value at city level.

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5. Filtering & Restaurant Details

The report allows filtering based on:

- Geography: Country (India), City (Bangalore)
- Services: Online delivery, Table booking
- Rating Color: Dark Green (high-rated restaurants)

Based on filters, the report displays:

- Restaurant address (e.g., Koramangala, Bangalore)
- Average Rating
- Average Cost for Two
- List of cuisines served

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6. Top Restaurants by Number of Cuisines

A **treemap visual** shows restaurants ranked by **count of cuisines served**.
For example:

- *Big Brewsky* shows **6 cuisines**, making it one of the top-ranked restaurants in terms of cuisine variety.

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7. Multi-page Report & Navigation

The report is designed as a **multi-page dashboard**:

- World Wide Analysis
- Restaurant Analysis

Navigation buttons are provided to move easily between pages.
The report follows **Zomato's theme** for consistent design.

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8. Web & Mobile Access

- The report is published to **Power BI Service** and accessible via web browser.
- A **mobile-optimized view** is created to ensure proper visualization on phone devices.

Conclusion

The Power BI report successfully meets all client requirements. It provides interactive, example-driven analysis at global and city levels, supports advanced filtering, highlights top-performing restaurants, and is accessible across web and mobile platforms. The outputs shown in the report directly correspond to the visuals and examples demonstrated in the attached screenshots.
