Zomato Analytics Dashboard Project Report

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1. Problem Statement

Zomato, a leading food delivery platform, needs a comprehensive analytics dashboard to gain insights into customer behaviours, restaurant performance, sales trends, and cuisine popularity. The goal is to help stakeholders make data-driven decisions to improve user engagement, operational efficiency, and Sales.

Key Questions:

- What are the total sales and order volumes?
- Which cities and cuisines contribute most to revenue?
- How does gender, age and occupation impact spending?
- How are customer ratings correlated with sales?
- What are the top-performing restaurants and food items?

2. Data Limitations

While the Zomato dataset provided valuable insights, there were certain limitations that should be acknowledged:

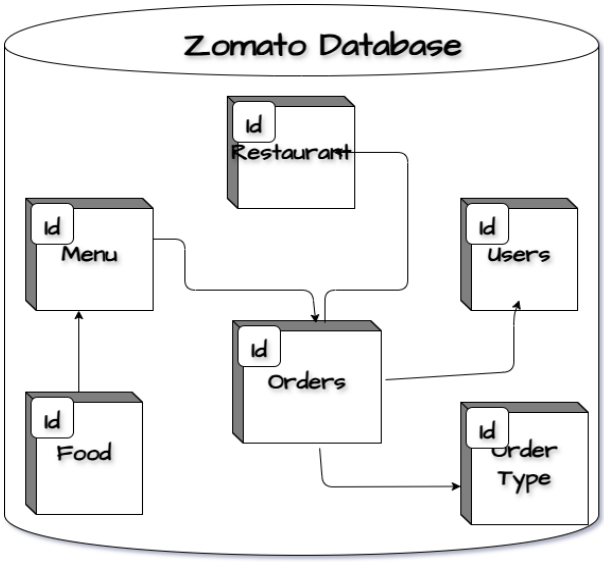
1. Limited Time Range:
    - The dataset may not cover all months or years, limiting long-term trend analysis and seasonal comparisons.
2. Sample Size:
    - The dataset might represent a subset of overall Zomato operations, so insights may not be generalized across all cities or user segments.
3. Missing or Incomplete Data:
    - Some fields (e.g., user demographics, ratings, or sales amounts) had missing or null values, which could affect the accuracy of certain metrics like Avg. Order Value or Gender-based analysis.
4. No Real-Time Data:
    - The data is static, so the dashboard doesn’t reflect real-time performance or current business scenarios.
5. Geographical Limitation:
    - Not all cities where Zomato operates may be included; the analysis is limited to the cities available in the dataset.
6. No Delivery Time or Distance Info:
    - The dataset lacks delivery-related parameters such as time taken, distance, delivery ratings—preventing logistics or operational efficiency insights.
7. Customer Feedback/Review Details Missing:
    - Although restaurant ratings are available, detailed customer reviews, feedback text, or sentiment analysis is not possible with the given data.
8. No Revenue or Commission Breakdown:
    - The dataset shows order-level sales, but not Zomato's commission or profit margins, so financial analysis is limited to gross revenue.

3. Data Preprocessing Steps

1. **Data Loading:**
    - Loaded six datasets: orders, users, restaurant, menu, food, order type.
2. **Data Modeling:**

    Created relationships:

    - orders.user_id → users.user_id
    - orders.r_id → restaurant.r_id
    - restaurant.r_id → menu.r_id
    - menu.f_id → food.f_id
    - orders.order_id → order_type.order_id

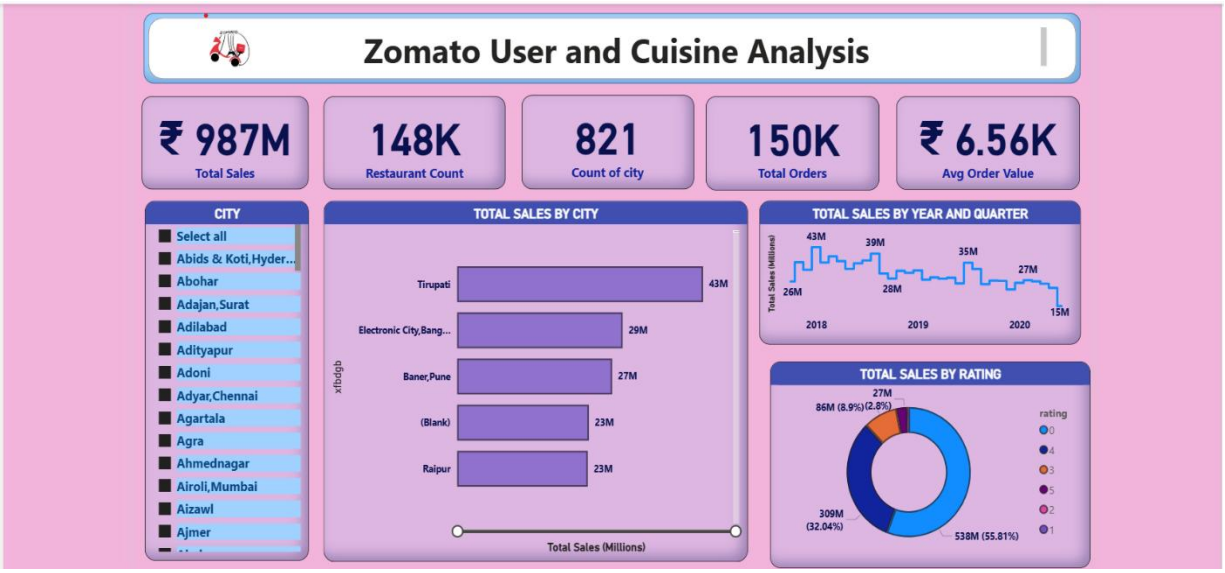


3. **Data Cleaning:**
    - Checked for nulls, duplicates.
    - Formatted columns (e.g., date, amount, quantities, Rating Missing).
    - Binned age into age groups for analysis.

4. Power BI Report Pages

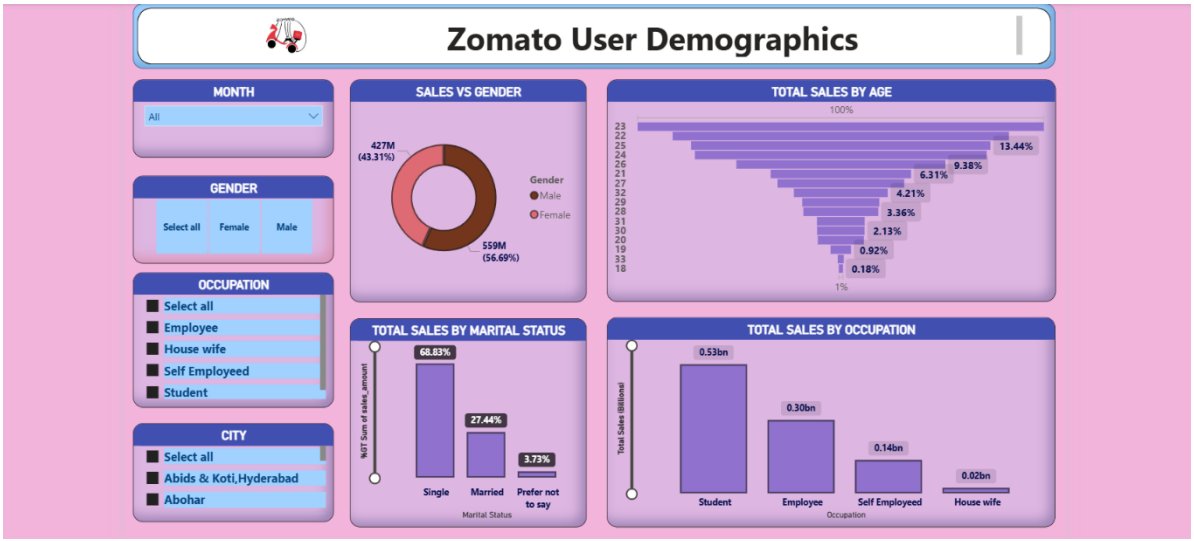
Page 1: Overview

- **KPI Cards:** Total Sales, Total Orders, Avg. Order Value, Unique Users
- **Line Chart:** Sales Trend over Time
- **Bar Chart:** Top 5 Cities by Sales
- **Donut Chart:** Order Type Distribution
- **Slicers:** Date



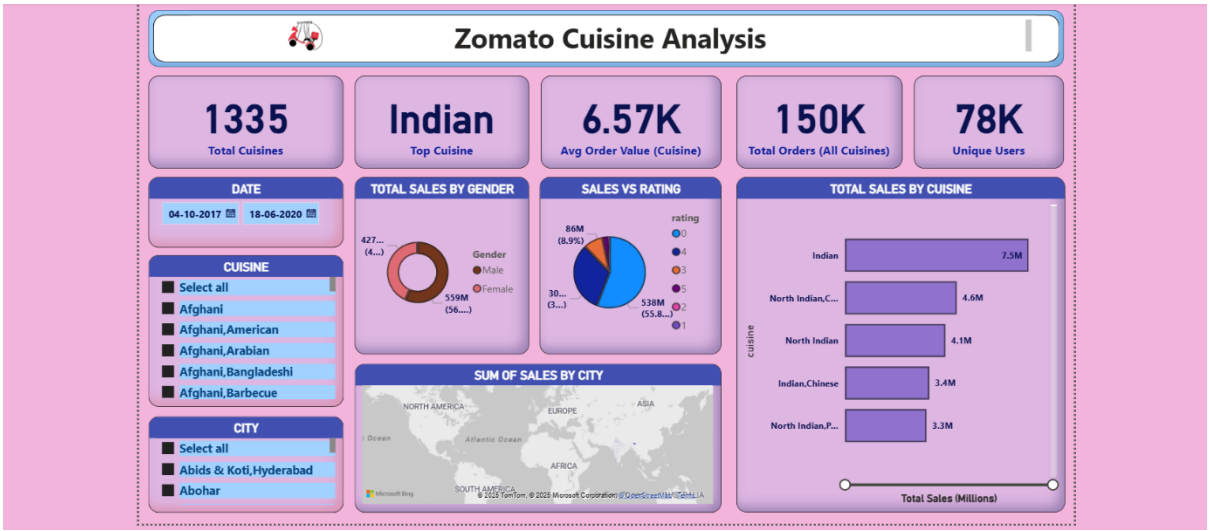
Page 2: User Demographics

- **Donut Chart:** Gender-wise Sales
- **Bar Chart:** Occupation vs Sales
- **Column Chart:** Martial Status vs Sales
- **Waterfall:** Age vs Sales
- **Slicers:** Date, City, Gender, Occupation



Page 3: Cuisine Analysis

- **Bar Chart:** Top 5 Cuisines
- **Map Chart:** Cuisine and Sales info
- **Donut:** Gender
- **Pie Chart:** Sales Rating
- **Slicers:** Date, City, Cuisine



5. DAX Measures Used

Measure	DAX Formula
Total Sales	SUM(Orders[sales_amount])
Total Orders	COUNTROWS(Orders)
Avg Order Value	DIVIDE([Total Sales], [Total Orders])
Total Users	DISTINCTCOUNT(Orders[user_id])
Total Quantity	SUM(Orders[sales_qty])

Additional measures for analysis:

- Sales by Gender, Age Group, Occupation, Cuisine, City
- Sales Trend (Time Intelligence)

6. Report Insights (Answers to Problem Statements)

- **Total Sales**: ₹987M (dynamic in dashboard)
- **Total Orders**: 150K Orders across the platform
- **Top Cities**: Tirupati, Bangalore, and Pune lead in total sales
- **Top Cuisines**: North Indian, Chinese, and Fast Food are the most ordered
- **Gender-wise Spending**: Males spent slightly more than females on average
- **Rating vs Sales**: Higher-rated restaurants generate more revenue
- **User Insights**:
    - Age group 25-25 contributes the most to revenue.
    - Working professionals and students are key user segments.
- **Cuisine Trends**: Seasonal spikes in specific cuisines (e.g., ice cream in summer)