Power Bi Dashboard for Swiggy Restaurant Data Analysis

**Project Overview:**

Developed an interactive Power BI dashboard for a comprehensive analysis of restaurant data across various regions in India. The project involved data loading, cleaning, relationship formation, and the creation of detailed visualizations to answer specific business questions.

**Tasks and Solutions:**

1. **Data Loading and Cleaning:**
   * Imported three tables into Power BI.
   * Performed data cleaning tasks, including handling missing values, correcting data types, and removing duplicates to ensure data accuracy and consistency.
2. **Relationship Formation:**
   * Established relationships between tables to enable seamless data integration and accurate analysis.
3. **Specific Analyses:**

State and City with Maximum Order Amount per Day:

* + Created bar charts to visualize the average order value and number of orders per day by state and city.
  + Identified Kolkata (city) as having the highest order amount per day, while Maharashtra had the maximum order amount as a state, with significant contributions from Mumbai and Pune.
* Cities with Average Number of Orders per Day and Delivery Times:
  + - Highlighted Kolkata as having the highest delivery time, while Surat had the lowest average number of orders per day.
* Top Restaurant Chains by Number of Outlets and Order Amount:
  + - Identified La Pino'Z Pizza with 13 outlets, and Subway, Baskin Robbins, and Nic Natural Ice with 10 outlets each, explaining the larger number of outlets due to their established presence.
* Best Performing Restaurant Categories in Maharashtra and Karnataka:
  + - Created combined bar and line charts to compare total number of reviews and average ratings of restaurant categories in Maharashtra and Karnataka.
    - Identified the 'Indian Restaurant Category' as the dominating category based on total reviews and average ratings.
* Additional Analysis:
  + Added a heat map to show the distribution of order amounts across different regions.
  + Noted that the northern region had the highest concentration of high-order amounts, indicating a potentially lucrative market for restaurant expansions.
  + Used pie charts to showcase the order value per day and the average number of orders per day.
  + Utilized a tree map to understand the distribution of reviews across different states.

**Tools and Technologies:** Power BI, Data Cleaning, Data Visualization

**Outcome:** The project resulted in a dynamic and insightful Power BI dashboard that provided valuable insights into restaurant operations and customer behavior. This analysis helped stakeholders make data-driven decisions to optimize operations and enhance customer satisfaction.