

Restaurant Revenue and Popularity Analysis

Research Questions

1. What restaurants are the most popular?
2. Which restaurants generate the highest revenue, and why?

Hypotheses

- **Cuisine Type & Popularity:** The type of cuisine a restaurant offers (from the `cuisine` column) is associated with its popularity, as measured by rating metrics.
- **Pricing & Popularity:** A restaurant's pricing (from the `cost` column) may influence its popularity, observable through higher ratings or review counts.
- **Sales Volume & Revenue:** The number of items sold (from the `sales quantity` in the orders dataset) serves as a strong indicator of revenue, with higher volumes suggesting more frequent customer activity.
- **Cuisine Variety & Popularity:** Restaurants that offer a wider variety of cuisines may be more popular. Popularity will be evaluated using the rating columns, while cuisine diversity will be measured by the number of unique cuisines listed.

Key Performance Indicators (KPIs)

- Average restaurant rating
- Sales quantity
- Number of cuisines offered per restaurant

Visualizations

- **Scatter Plot:** Average Restaurant charges with popularity.
- **Bar Chart:** Average restaurant ratings w/Cuisines to investigate the popularity of certain cuisines.

- **Scatter Plot:** Relationship between popularity and quantity of cuisines served

Data Preparation

- Cleaned both **Restaurant** and **Orders** datasets:
 - Addressed missing data
 - Created calculated columns to improve data clarity and usability
- Data was joined using **restaurant_ID** in **Tableau** to merge information from both datasets for visualization and analysis.