

Final Project

The purpose of this project is to use the given datasets to find out what restaurants are popular and gain some insight on why. This insight can be used to help establish new popular restaurants. For this project, the popularity of a restaurant is based on its sales amounts or revenue generated. The data on restaurants and their orders were required for this analysis.

The first step taken was to see whether or not a restaurant's average rating made a significant impact on its sales. Using a scatterplot that graphed the average rating and sales amount for each restaurant, almost no correlation was found. Restaurants with a 5 out of 5 rating could have very little sales while a restaurant with less than a 2 star rating could have almost \$250,000 in sales. However, when I filtered to only restaurants with \$100,000 or more in sales amount, the correlation of sales amounts to average ratings grew. When considering restaurants with sales above \$500,000, there were none with less than a 2.5 star average rating. So, to produce a restaurant with more than \$100,000 in sales, it seems a higher average rating can be helpful. At the same time, to produce \$500,000 or more in sales, a rating higher than 2.5 is important. However, receiving high ratings doesn't guarantee higher sales, and receiving low ratings doesn't guarantee lower sales.

Using more scatterplots, it was found that restaurants with more locations tend to have higher sales amounts. Additionally, higher restaurant counts within a city correlated with higher sales amounts in that city. However, Tirupati was an outlier, having substantially higher sales than every other city with a relatively lower count of restaurants. Generally speaking, cities with high sales are good places to look into adding new restaurants. So, Tirupati may be an especially good city to look at for new restaurant locations. There are quite a few cities with high restaurant counts but very low sales. These cities, or cities with low sales in general, would be good to avoid when looking to add new restaurants.

The dashboard I created shows the sale amounts from the cities and cuisines from highest to lowest. The top five or so cuisines and cities would be a good place to start when deciding what kinds of restaurants the company wants to open and where. To get more specific, click on desirable cities, or cities with high sales, and the dashboard will show the top cuisines for those cities. Doing this will help find what restaurant cuisines are likely to succeed in different cities. Also, if the company is looking to open restaurants with specific cuisines, they can find what cities enjoy that cuisine most.

These are the top five cities with the highest sales that would be good to consider for new locations:

1. Tirupati
2. Electronic City, Bangalore
3. Baner, Pune
4. Raipur
5. Malviya Nagar, Delhi

These are the top five cuisines that may be good to consider for new restaurants in any location:

1. North Indian
2. Chinese
3. South Indian
4. Bakery
5. Pizzas