

**Goal:** Restaurant Analysis: What restaurants are popular? What restaurants generate the highest revenue? Why?

When I began looking at the data, I started out with the following hypothesis:

Restaurants with the most popular cuisines and the highest ratings are the most popular and have the highest revenue.

I also had the following questions I wanted to ask to figure out the answer:

- What is the most popular cuisine according to the data?
- Which restaurants have the highest average ratings?
- How do popular cuisines and high ratings affect a restaurant's business?
- Are the most popular restaurants well known chains? Or more local restaurants?

### Chart 1: Most Profitable Restaurants

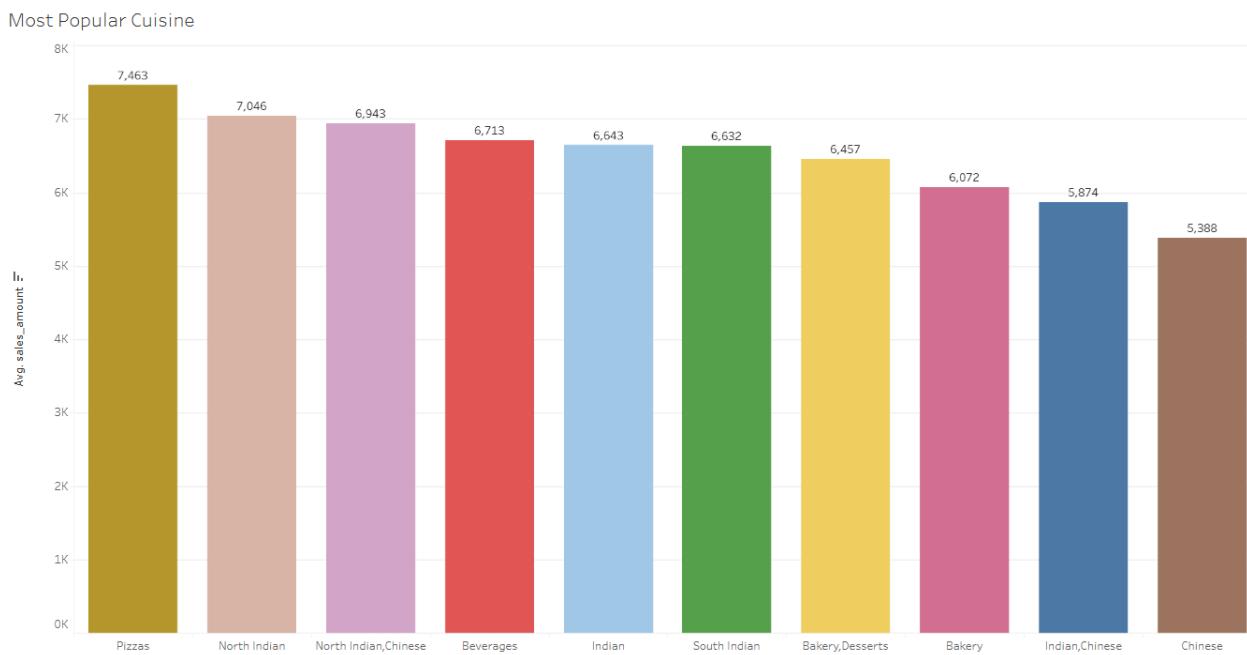
According to customers orders from 10/4/2017-6/26/2020, Domino's Pizza recorded the highest total sales with over \$5,025,266 within this timeframe. This far outpaced even the second highest total sales at \$1,958,408. Also worth noting half of the top 10 highest performing restaurants were all international chain restaurants (Dominos, Pizza Hut, Baskin Robbins, KFC, and McDonalds).



Insight: This answered the main questions of which restaurants were the most popular and generated the highest revenue. The next charts would help determine why.

### Chart 2: Most Popular Cuisine

I began looking into which cuisine was most popular among customers. I found that when totaling the entire customer base between 10/4/2017-6/26/2020, on average customers chose pizza as their preferred cuisine, with customers on average \$7,463 worth of pizza, the next largest being North Indian food (foods like Chicken Makhan & Dal Makhani) at \$7,046.

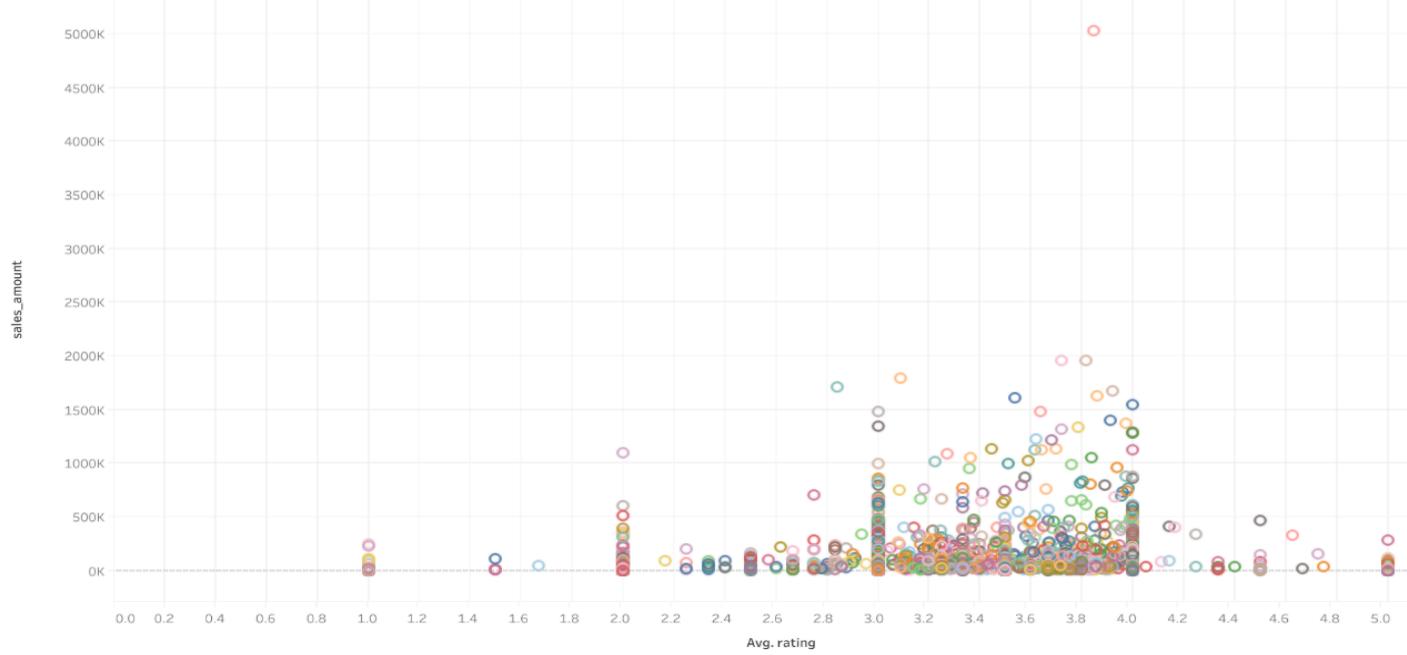


Insight: On average pizza was the most popular dish, which partly explains why pizza restaurants like Domino's Pizza and Pizza Hut are so popular, with cuisines like North Indian/North Indian Chinese cuisines following closely behind.

### Chart 3: Ratings to Sales From Restaurants

I wanted to see how ratings affected sales in each restaurant: did high ratings translate into higher sales? To do this, I needed to see not only how many total ratings each restaurant received, but also their overall total sales as shown in the first chart.

Ratings to Sales from Restaurant

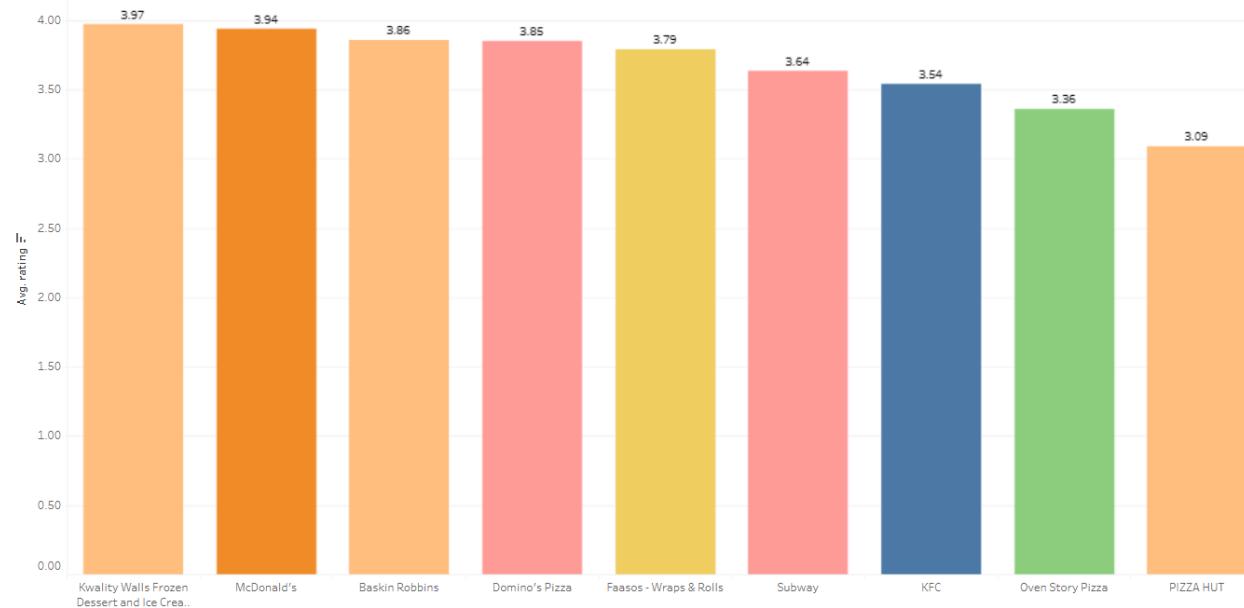


Insight: The most profitable restaurants with the most amount of ratings usually scored between 3-4 on a 5 point scale. This showed that even without the highest rating of a 5/5, restaurants like Domino's Pizza still had a high amount of sales, even compared to other stores.

#### Chart 4: Average Ratings per Restaurant

I wanted to look deeper into what the average rating was for the most popular restaurants. Did most profitable restaurants lead to higher scores? I began by calculating the average rating of each restaurant based on how many ratings the restaurant received from customers. The ratings were from 1-5 and received the average based on the number of total ratings. For example, one restaurant may have a 5/5 score based on only 3 customer reviews, whereas a restaurant like Domino's Pizza may have 3.85 based on 410 customer reviews.

Average Ratings per Restaurant



Insight: The data shows that of the 9 listed restaurants had average reviews of 3-4 / 5, with Kwality Walls Frozen Dessert and Ice Cream at the highest with 3.97 then McDonald's at 3.94 then Baskin Robbins at 3.86.

Of the restaurants listed, 6 of the 9 restaurants listed were international chain restaurants found throughout the world. This showed a high preference to internationally recognized brands, with an average rating of 3-4 out of 5 for more popular restaurants with a high amount of total ratings.

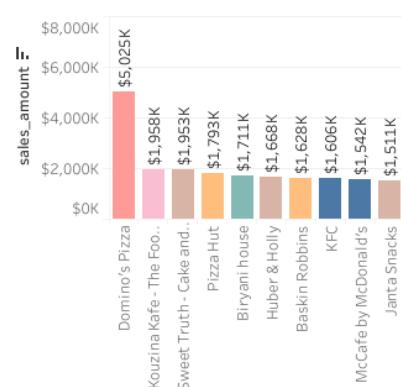
### Dashboard: Overall insights and answers to questions

- What is the most popular cuisine according to the data?
  - Answer: Pizza followed by North Indian then North Indian and Chinese food.
- Which restaurants have the highest total ratings?
  - Answer: Kwality Walls Frozen Dessert and Ice Cream at the highest with 3.97, then McDonald's at 3.94, then Baskin Robbins at 3.86.
- How do popular cuisines and high ratings affect a restaurant's business?
  - Answer: Pizza and restaurant ratings between 3-4 / 5 seem to be the most profitable vs restaurants with low or perfect 5/5 scores.
- Are the most popular restaurants well known chains? Or more local restaurants?

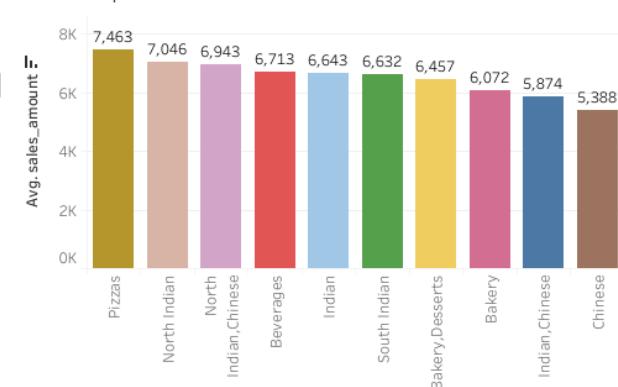
- Answer: The most popular restaurants seem to be well known chains: specifically pizza restaurants like Domino's and Pizza Hut, but also other restaurants like KFC and McDonalds.

### Most Profitable & Highest Revenue Restaurants

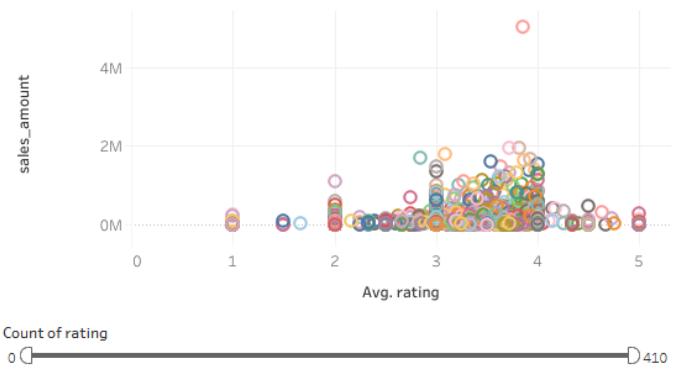
Most Profitable Restaurant



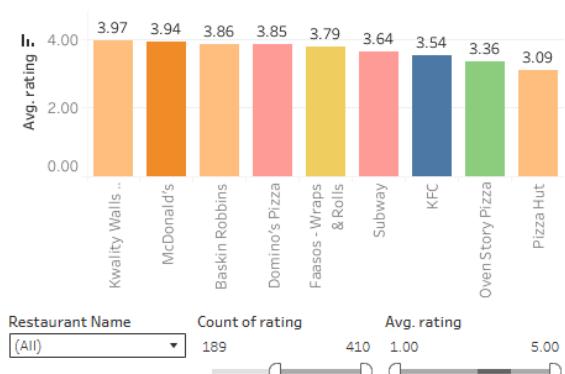
Most Popular Cuisine



Ratings to Sales from Restaurant



Average Ratings per Restaurant



### Conclusions, Insights, Recommendations

In conclusion, pizza was the most popular cuisine among customers, the most popular restaurants were international chains such as Domino's Pizza and Pizza Hut, and the most popular and profitable restaurants had an average rating of 3-4 out of a 5 point rating system.

Recommendations:

- Pizza is the most popular cuisine on average with Domino's Pizza being the most profitable. Focus on opening more pizza restaurants to increase revenue.

- Focus on opening more international chain restaurants due to brand recognition, especially ones that serve pizza.
- Diversify by also investing into restaurants that sell Indian food, as these were also on average the most popular cuisine items behind pizza.
- Encourage more users to rate their experience at a restaurant to have more data to better discover customer trends. Recommend offering a discount on a meal or a free small side to help boost participation.