A Movable Feast

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Background

More than 112 million Americans say they've used a food delivery service in 2020.

According to Statista

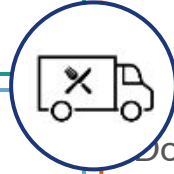60% of American consumers order takeout or delivery at least once a week.

According to Nation's Restaurant News

The online food delivery industry has generated $26.5 billion in 2020.
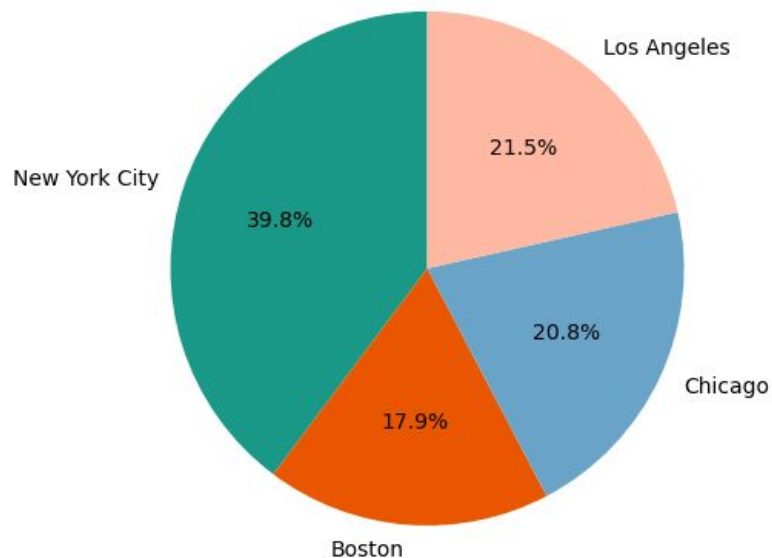
According to Statista

DoorDash and their subsidiaries hold 59% of the U.S. consumer's meal delivery sales.

According to Bloomberg

Overview of Project

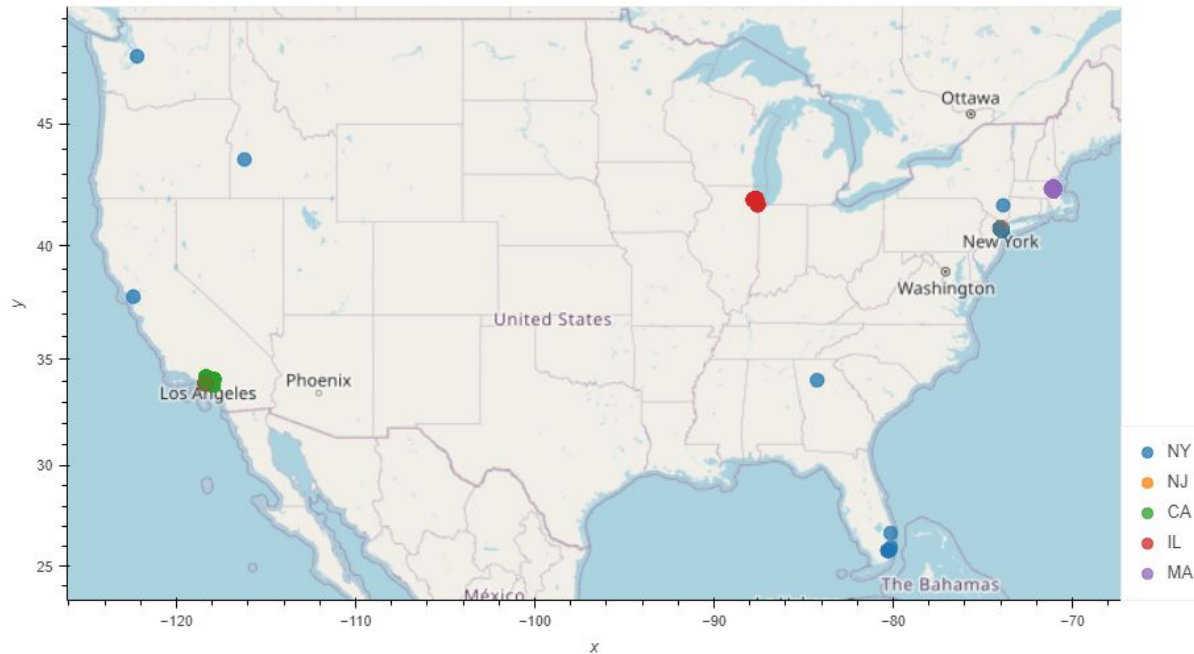Breakdown of Order Data by Metro Area

Analysis will look at:

- Popularity of Cuisines
- Food vs Non-Food Deliveries
- Correlation between Delivery Times and Ratings
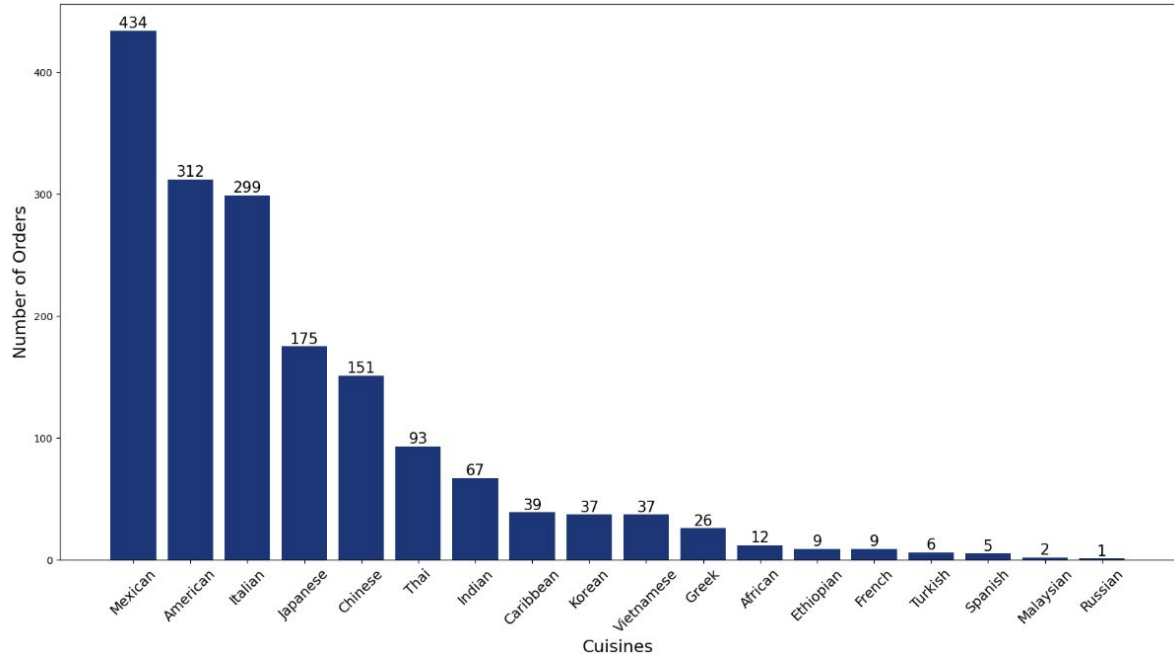
Cuisine popularity

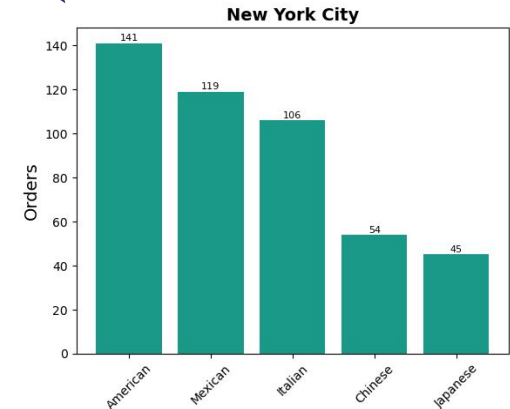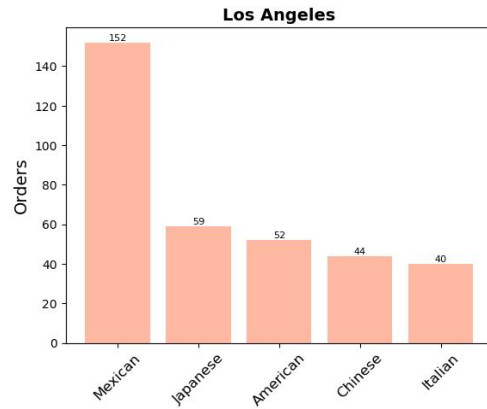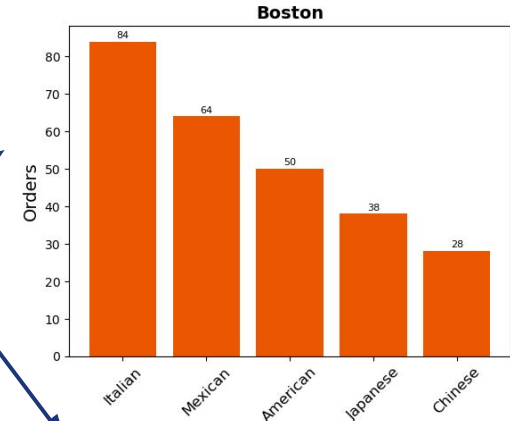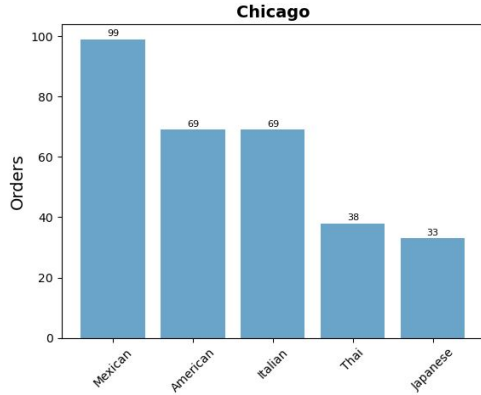# Customer Locations:

Order Locations:

Popularity of Cuisines across the 4 Metro Areas

Top 5 cuisines across

all metro areas:

1. Mexican
2. American
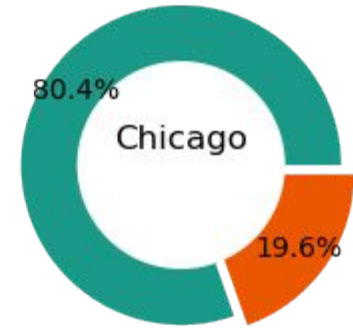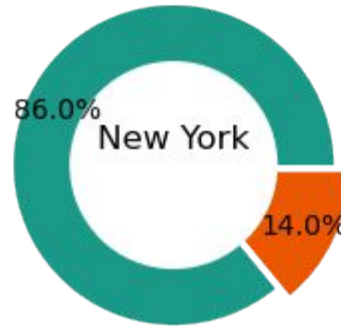3. Italian
4. Japanese
5. Chinese

5 Most Popular Cuisines by Metro Area

Based on the market comparison, Mexican, Italian and American were consistently top cuisines in each region

Food orders vs. others

- Bostonians and Angelenos are far more likely than their New York and Chicagoan counterparts to use Door Dash to pick up convenience items

- Across the board, people are still much more likely to use DoorDash for cuisine

Orders: Cuisine vs. Convenience

New York — 86.0% Cuisine, 14.0% Convenience

Chicago — 80.4% Cuisine, 19.6% Convenience

Boston — 69.5% Cuisine, 30.5% Convenience

Los Angeles — 69.1% Cuisine, 30.9% Convenience
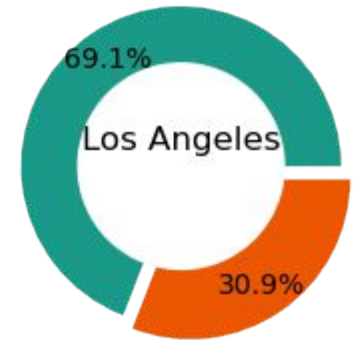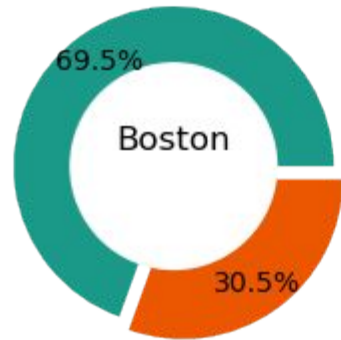
Legend: Cuisine, Convenience

- Los Angeles was the only city where groceries were not the most ordered convenience item
- New Yorkers love to send flowers, whereas Chicagoans and Angelenos are all about their pets!
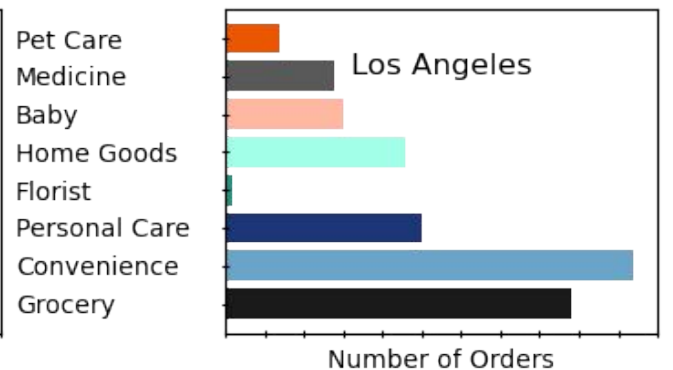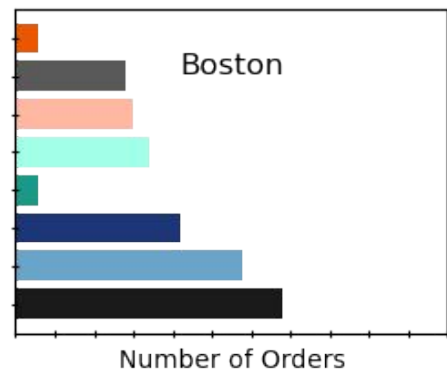
Non-Cuisine Orders
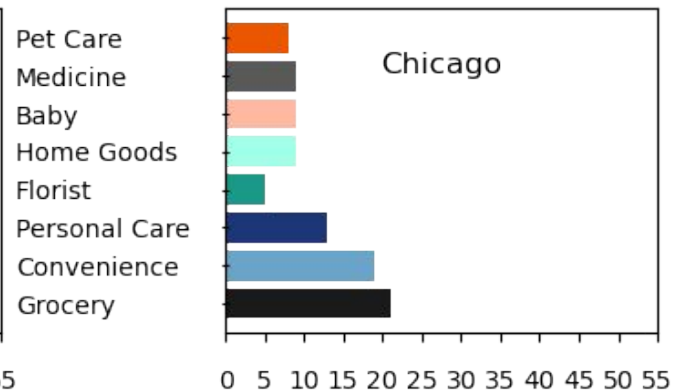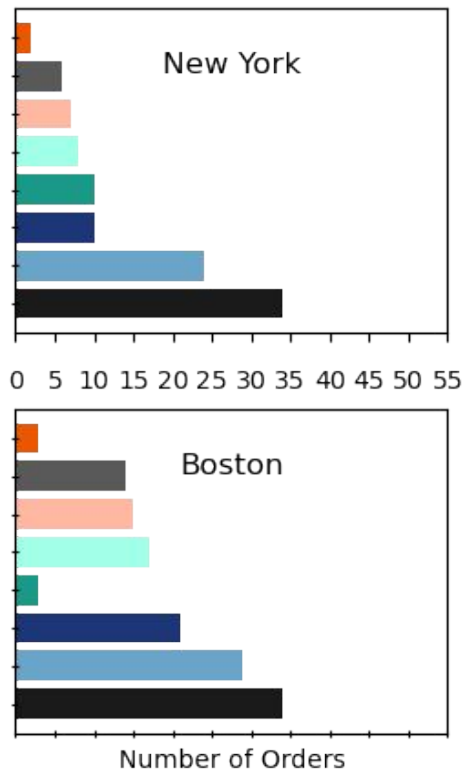
Delivery Time vs. Rating

Overall, there is no correlation between delivery time and rating of the business.

This is was true even when we examined the data separately by metro (NY, LA, CH, BO).

Linear regression results returned r-values for each of these metros that were **near 0** and almost all had a **p-value < 0.05.**

In hindsight, this makes sense because ratings of businesses **will likely not** be affected by the delivery time.

Delivery Time vs. Rating

y = -0.0x + 3.98

review_rating

delivery_time (in min)

Scatterplot showing the relationship between delivery time and rating of business across all metros
(r-value: -0.10, p = 9.63e-11)

Limitations

- No information on when data was collected; couldn't do deeper analysis on consumer's order patterns, e.g. what food do people like to order on weekdays vs. weekends?

- Data only pulled from 5 states, not the entire country

- Difficult to do more in-depth analysis around what other factors may have contributed to the ratings (e.g. lack of qualitative data, other data points)

- Cuisine categorization wasn't standardized and needed some type of manipulation

Key Takeaways

- New York City had the highest number of the orders

- Three of the four metros share the top three popular cuisines, except for Los Angeles

- Boston and Los Angeles both had much higher rates of ordering non-cuisine items. However, these cities are very different from each other

- There wasn't a significant correlation between rating and delivery time, but hard to know through analysis, what other factors there are that determine rating

Next Steps

- Analyze additional data so we can see order and food item comparisons based on which day of the week it is and how that affects preferences

- Do more analysis on ratings by cuisine, to see which cuisines in the food scene could be improved

- More granular classification on the types of businesses to see what people have a preference for ordering, by metro

Thank you!

Questions?