

Business Intelligence Report

with Analytics

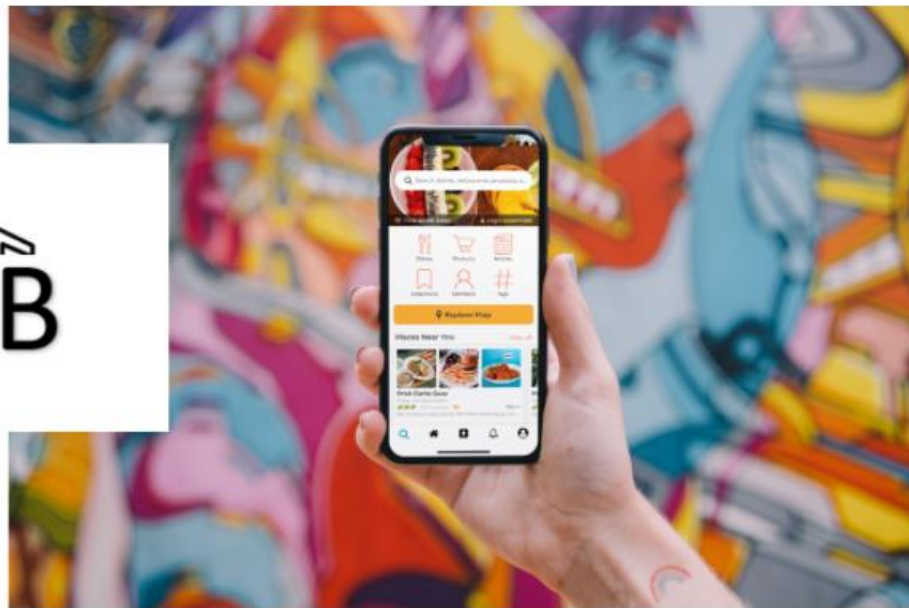


The flavor of your favourite food
is just a click away...

FOOD HUB



Supported by iOS and Android



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Business Problem Overview and Solution Approach

- *The purpose of this report is to explore how Food Hub can utilize their own financial data to identify and address the many strengths and challenges in their busy operation by examining several strategic variables. Relying on data that they already have available, we will show how financial metrics can be used by management to gain cost saving steps and avoid risks, that otherwise wouldn't be realized.*
- *The number of restaurants in New York is increasing weekly. Lots of students and busy professionals rely on those restaurants due to their hectic lifestyles. Online food delivery service is almost a 'must' for them. It not only provides them with tasty food from their favorite restaurants but allows ease of ordering and a time-saving method. Through a single mobile app, Food Hub offers access to multiple restaurants through a single smartphone site. Food Hub wants to meet the challenge by studying the demand of hungry customers, the vital rate of preparation time, the crucial speed of delivery time, and the wide range of cuisines offered in New York.*
- *This report aims to identify cross-cutting issues that may impact key metrics and how they can be addressed.*

Overview of the Data

- *Approximately 1900 records were acquired that included categorial details such as the name of restaurants, the types of cuisines, the day of the week and the rating of each establishment. In addition, numerical data was obtained that included the cost of each order, the delivery times and the preparation times for each order.*
- *Very few significant manipulations were made to the data. Other than the rating for the restaurant, data was available for every order.*

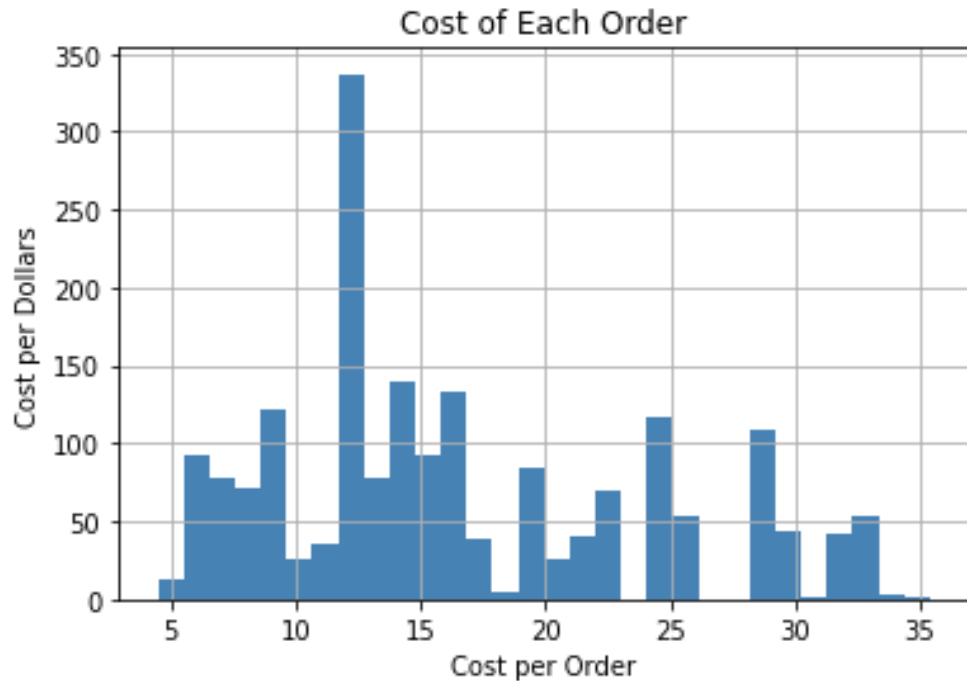
Exploratory Data Analysis – Cost per Order

There were 1,898 food orders that were analyzed, ranging from \$4.60 to \$35.41 per order.

The average order was \$16.50.

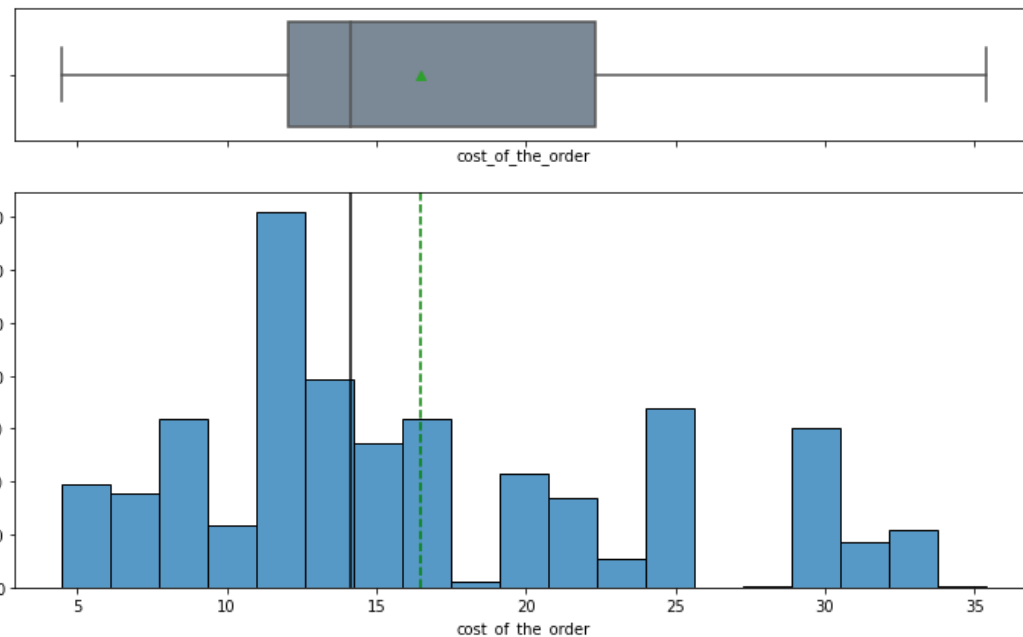
The amount for the highest number of orders was \$12.18 as seen in the graph.

Almost 30% of the orders placed totaled more than \$20.



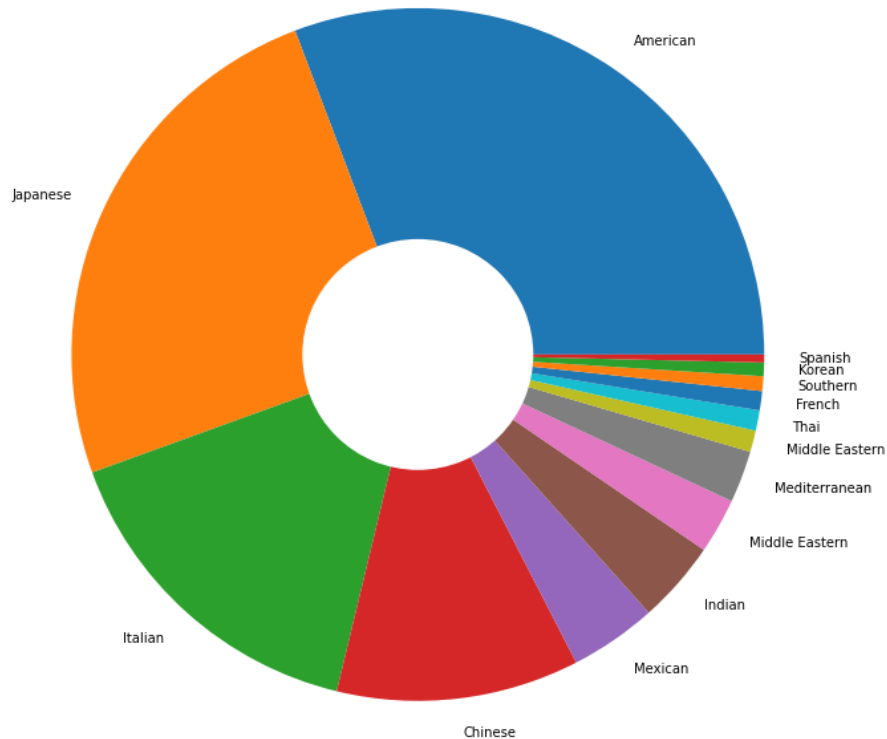
Exploratory Data Analysis – Cost per Order (cont.)

Most of the orders placed with the Food Hub app were at a cost below the average value of 16.49 dollars resulting in right skewed graph.



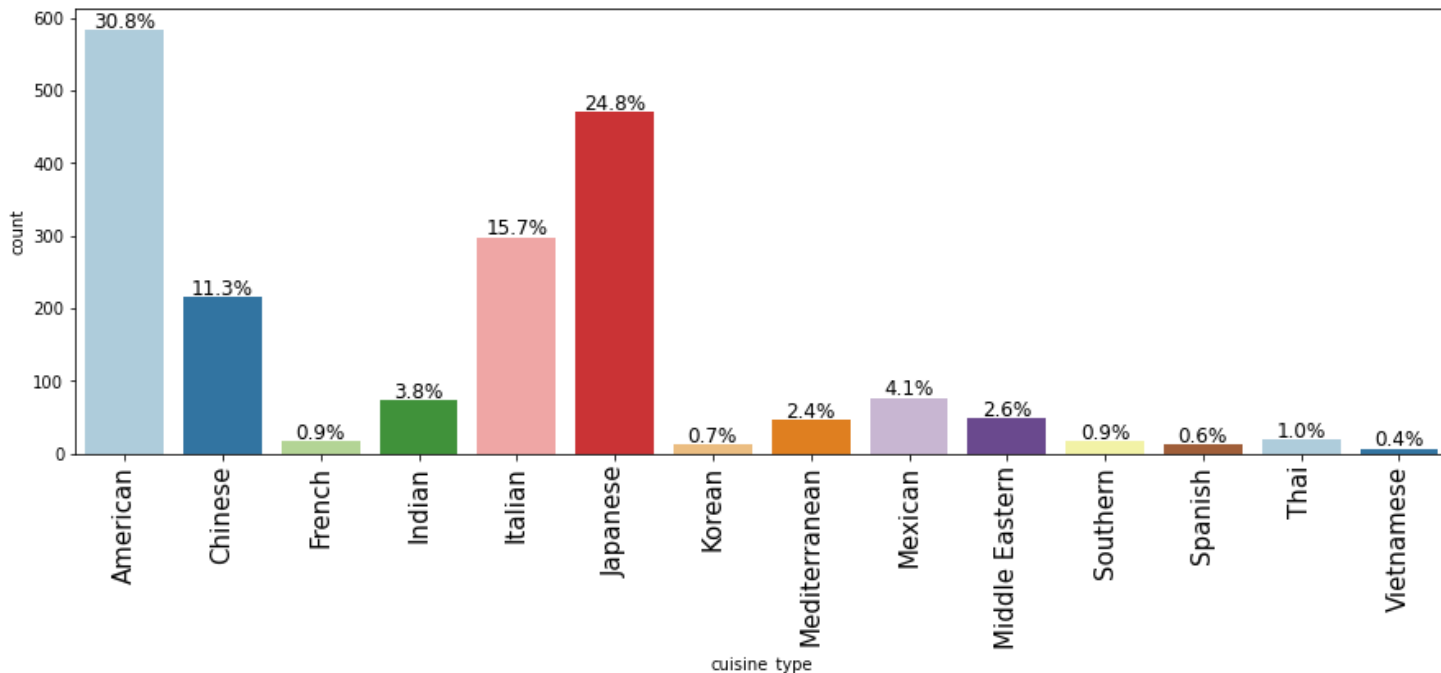
Exploratory Data Analysis – Cuisine Types

There were a total of 14 different types of cuisine that were ordered, with American at the top at 31% followed closely by Japanese at 25%. Italian and Chinese closed out the top 4 cuisines at 16% and 11%, respectively. The rest of the types were less than 4%.



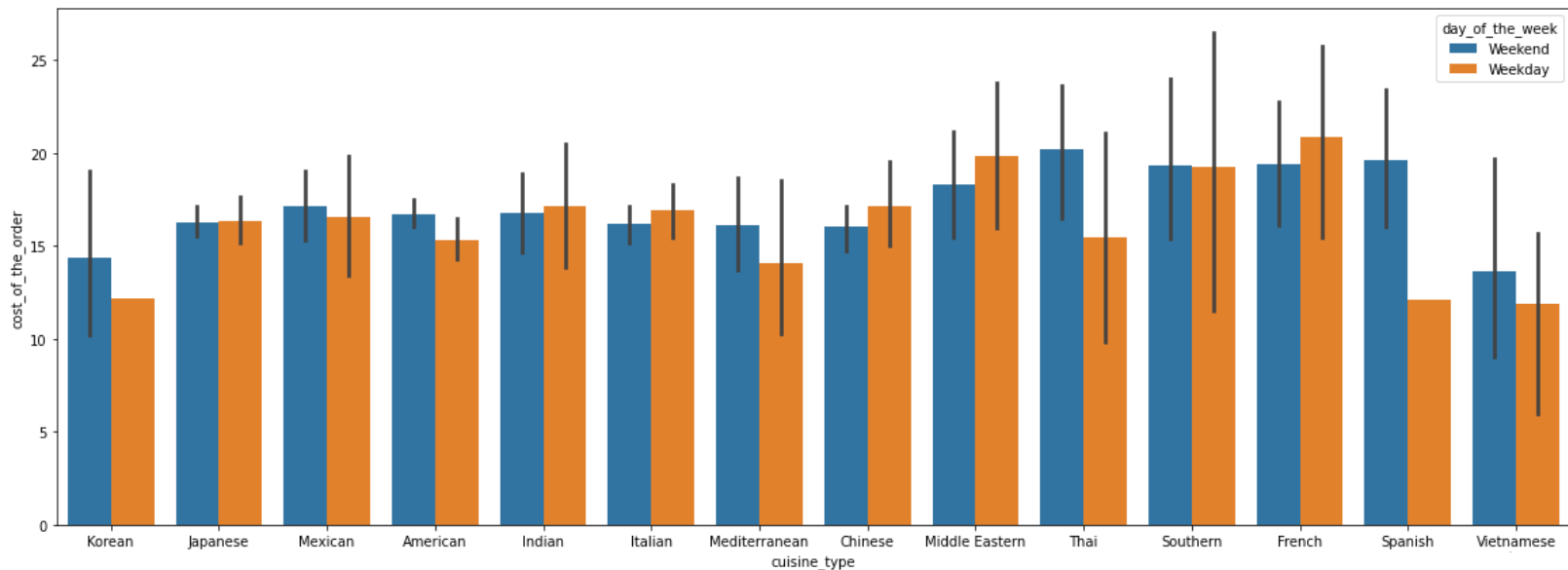
Exploratory Data Analysis – Cuisine Types (cont.)

The graph confirms the percentages for each of the 14 cuisine types offered by Food Hub.



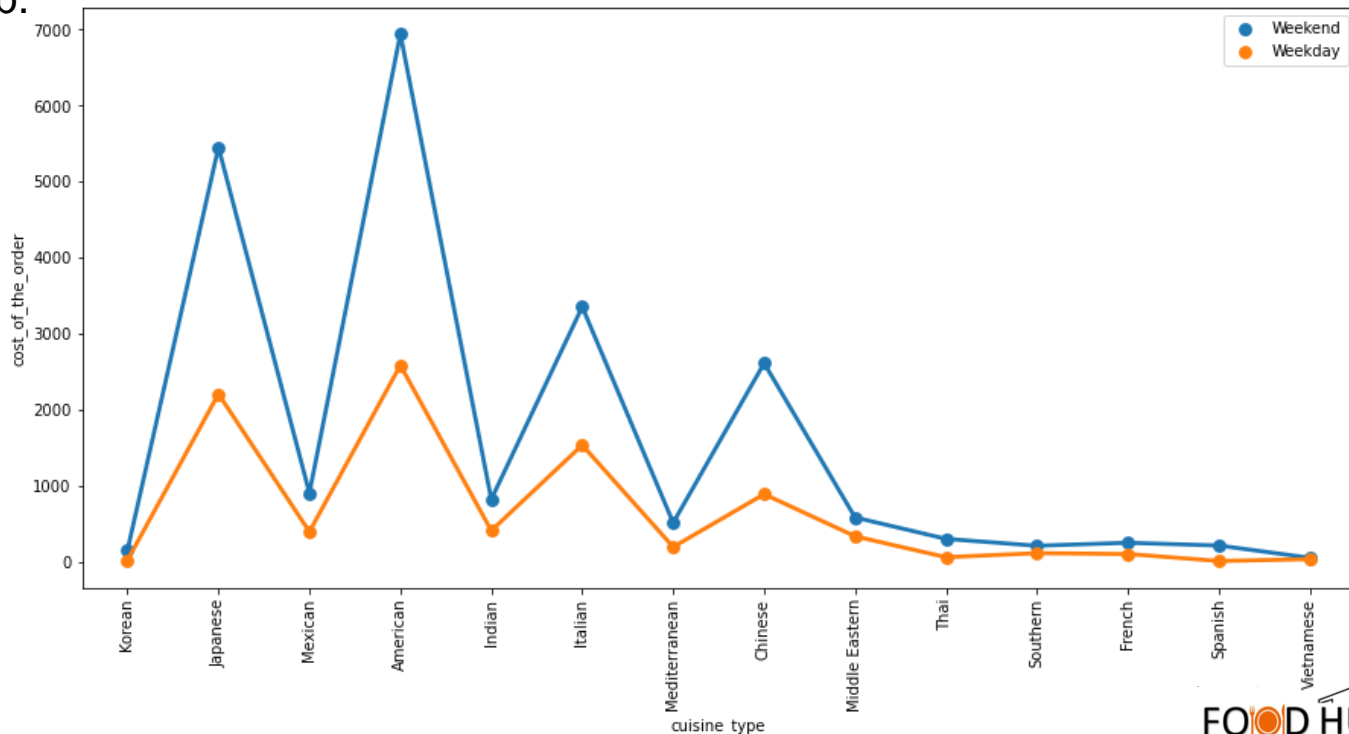
Exploratory Data Analysis – Cuisine Types (cont.)

Korean, Spanish and Vietnamese were the not only the least expensive during the week, but were some of the less popular choices, as well.



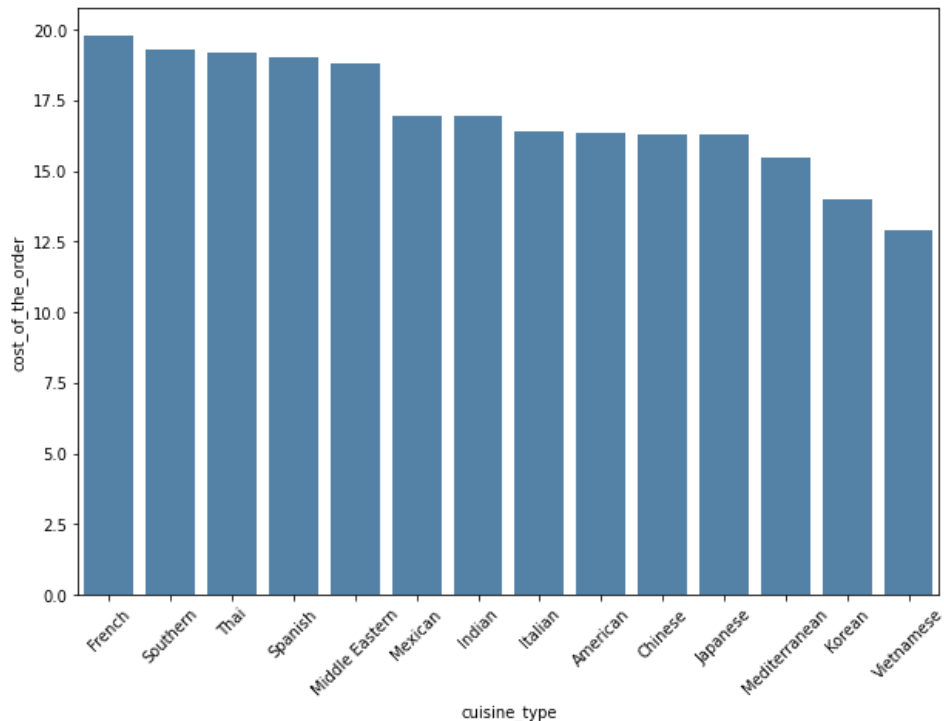
Exploratory Data Analysis – Cuisine Types (cont.)

Although American cuisine was a favorite during the weekdays, the category soared on the weekends compared to the other cuisine types offered by Food Hub.



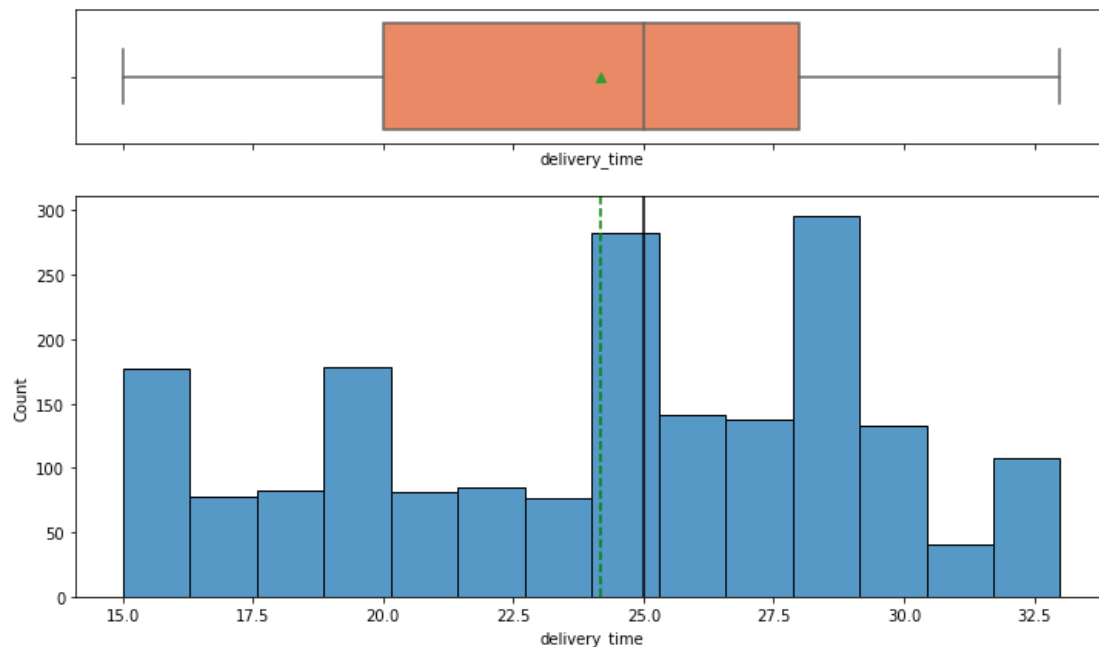
Exploratory Data Analysis – Cuisine Types (cont.)

Although American cuisine was a favorite compared to the number of orders, the highest revenue, per order, was from the French restaurants.



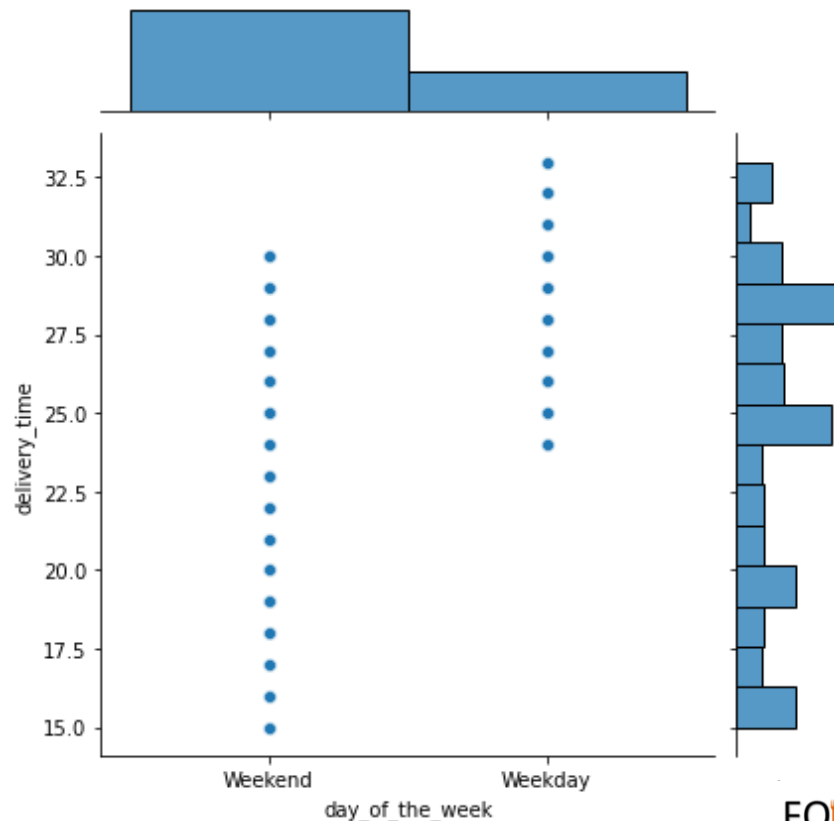
Exploratory Data Analysis – Delivery Time

The delivery times were fairly distributed ranging from 15 minutes, as the low, to 33 minutes, as the high with an average of 24 minutes per order. Most of the delivery times delivered by the Food Hub app were greater than the average of 24 minutes resulting in a left skewed graph.



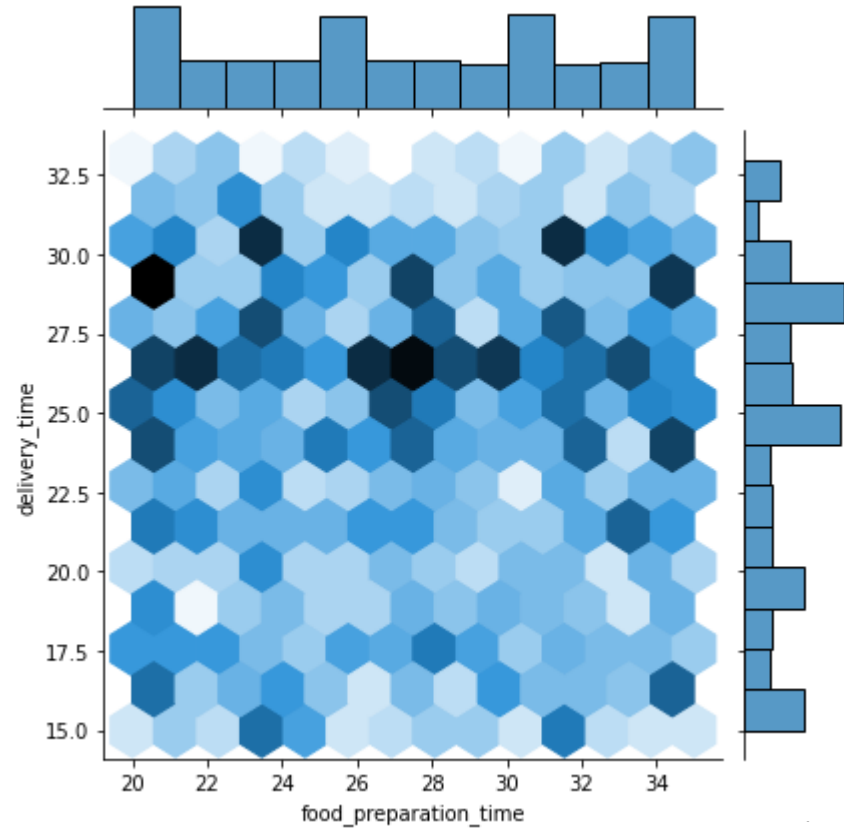
Exploratory Data Analysis – Delivery Time

Although the times ranged from 15.0 mins to 33.0 mins for all deliveries, the weekend deliveries were slower ranging from 15.0 mins to 30.0 mins, while the weekday deliveries ranged from 24 mins to 33.0 mins.



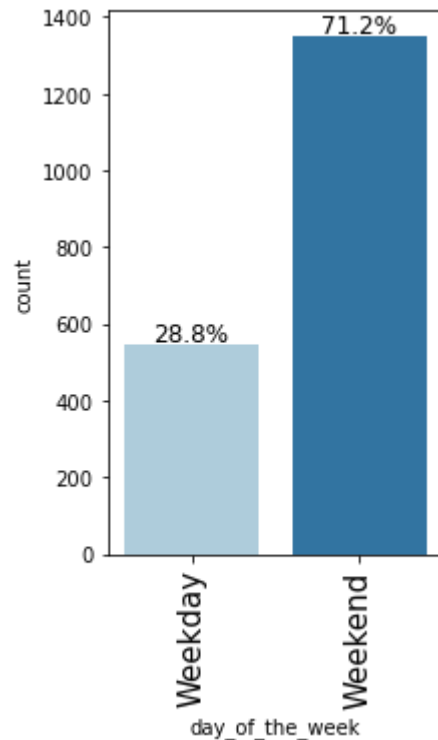
Exploratory Data Analysis – Delivery Time (cont.)

The times to deliver the food and the delivery times were mainly equal. The darkest hex shapes reflect the densest of data points.



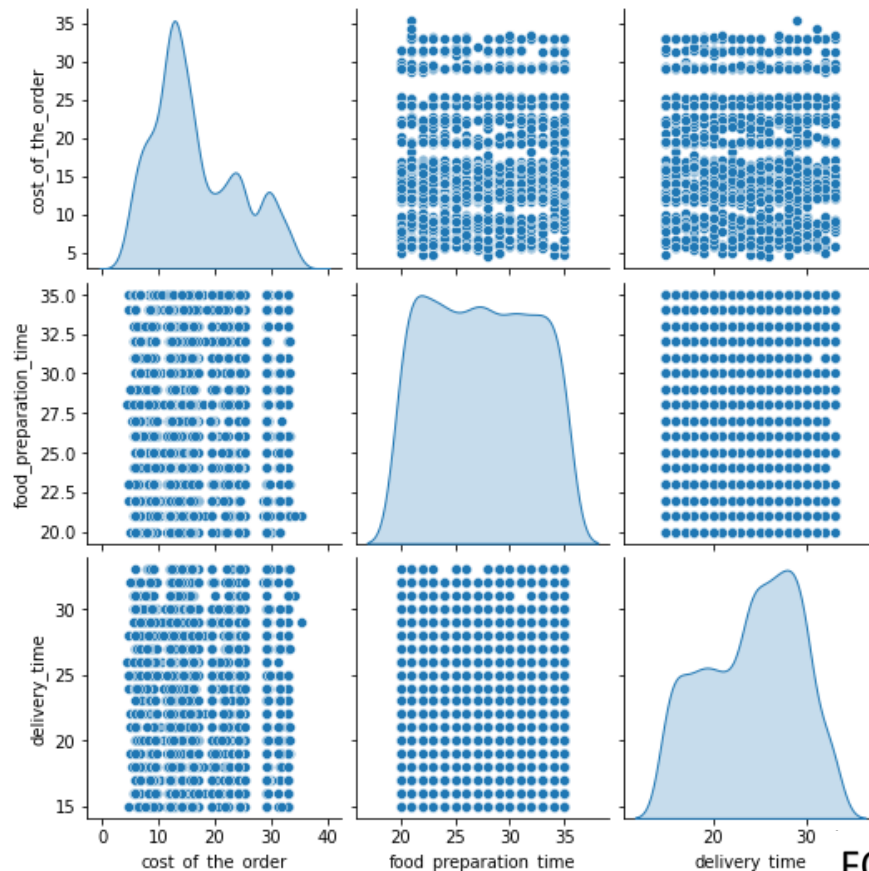
Exploratory Data Analysis – Day of the Week

As seen in the graph, Food Hub was used almost 2.5 times more on the Weekend than the Weekday.



Exploratory Data Analysis – Summary of Points

As seen in the graphs, the cost of the orders were skewed to the right while the delivery times were skewed to the left. The times to deliver the food and the delivery times were mainly equal.



Business Insights and Recommendations

- *Actionable insights based on an analysis of the data reveal some key points for future decisions. American cuisine is by far the most popular with Korean and Vietnamese on the other end of the spectrum. The need for shorter delivery times during the weekday is evident by the analysis. Another important aspect that the data reflected was the need to have enough workers to prepare and deliver the food on the weekends as compared to the weekday. The demand is 2.5 times higher on the weekend than the weekday.*
- *Adding more Vietnamese, Korean and Spanish restaurants would not necessarily generate more revenue for Food Hub due to the low response for these types of cuisine, even though the cost per order is low compared to American, Japanese and Italian types. Clearly, those in New York are not driven by cost savings.*