

air_reserve.csv

This file contains reservations made in the air system. Note that the reserve_datetime indicates the time when the reservation was created, whereas the visit_datetime is the time in the future where the visit will occur.

air_store_id - the restaurant's id in the air system

visit_datetime - the time of the reservation

reserve_datetime - the time the reservation was made

reserve_visitors - the number of visitors for that reservation

hpg_reserve.csv

This file contains reservations made in the hpg system.

hpg_store_id - the restaurant's id in the hpg system

visit_datetime - the time of the reservation

reserve_datetime - the time the reservation was made

reserve_visitors - the number of visitors for that reservation

air_store_info.csv

This file contains information about select air restaurants. Column names and contents are self-explanatory.

air_store_id

air_genre_name

air_area_name

latitude

longitude

hpg_store_info.csv

This file contains information about select hpg restaurants. Column names and contents are self-explanatory.

hpg_store_id

hpg_genre_name

hpg_area_name

latitude

longitude

store_id_relation.csv

This file allows you to join select restaurants that have both the air and hpg system.

hpg_store_id

air_store_id

air_visit_data.csv

This file contains historical visit data for the air restaurants.

air_store_id

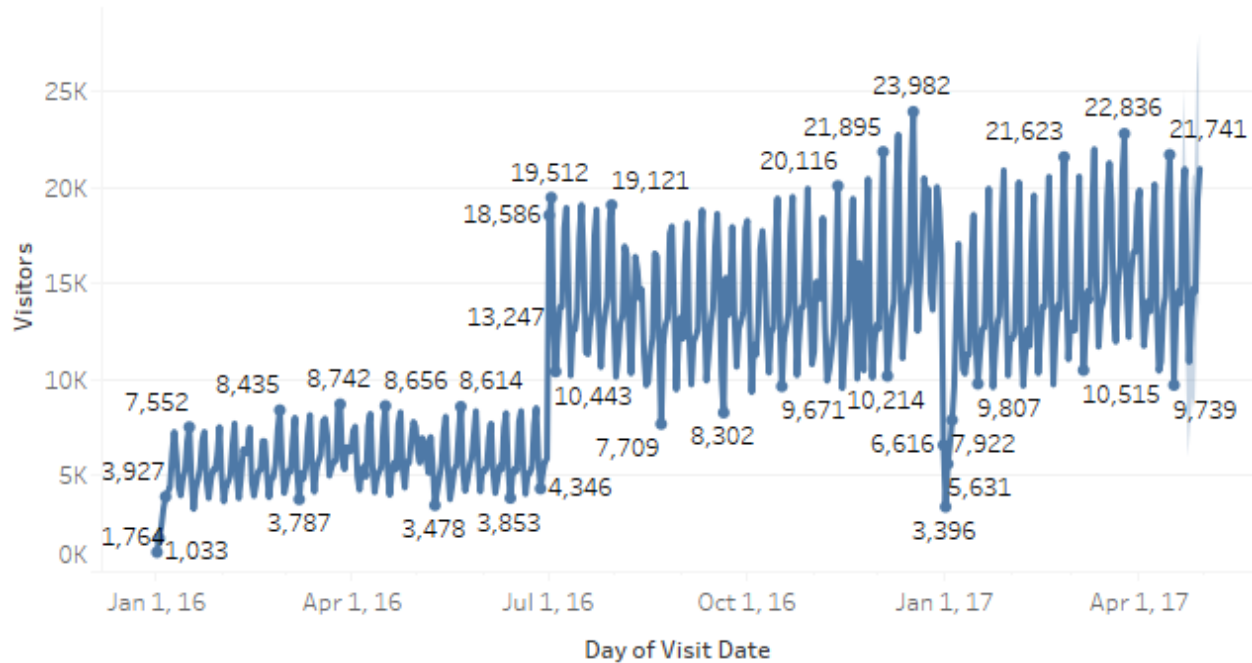
visit_date - the date

visitors - the number of visitors to the restaurant on the date

AIR VISIT

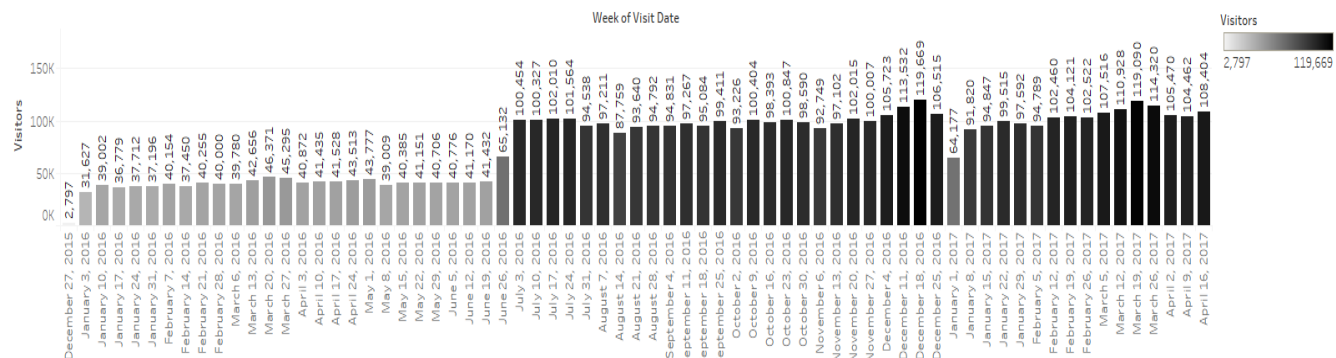
We start with the number of visits to the *air* restaurants.

Number of guest per day



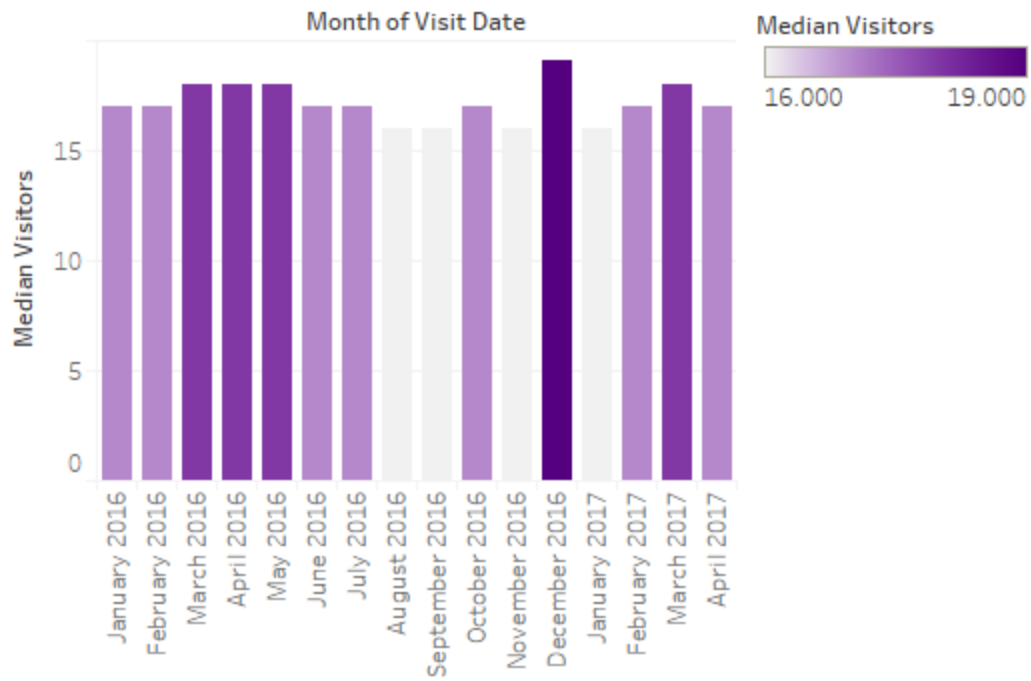
The trend of sum of Visitors (actual & forecast) for Visit Date Day. The marks are labeled by sum of Visitors (actual & forecast).

Number of guest per week



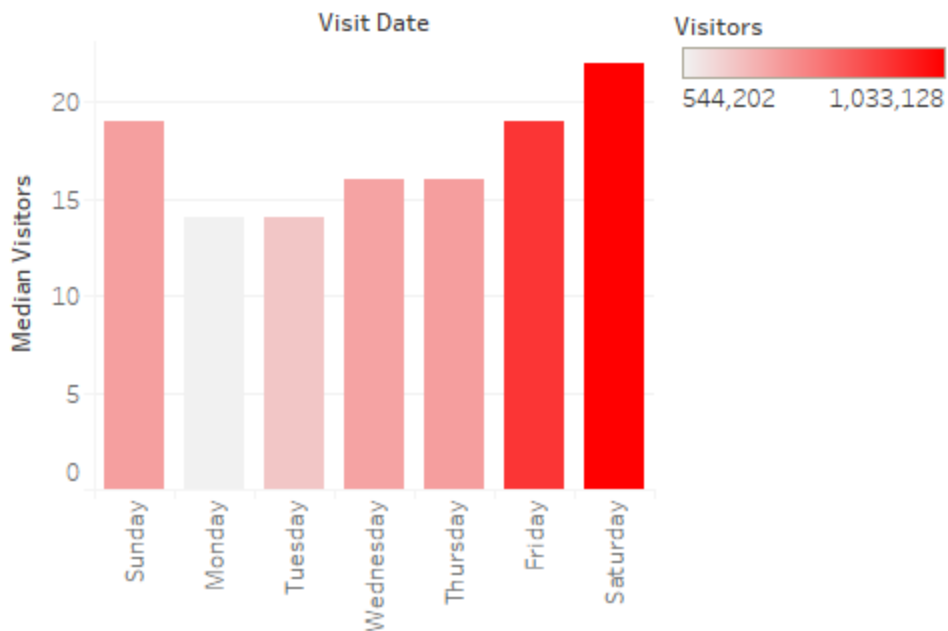
Sum of Visitors for each Visit Date Week. Color shows sum of Visitors. The marks are labeled by sum of Visitors.

Number of guest month wise



Median of Visitors for each Visit Date Month. Color shows median of Visitors.

Median number of guests per visit per restaurant per day



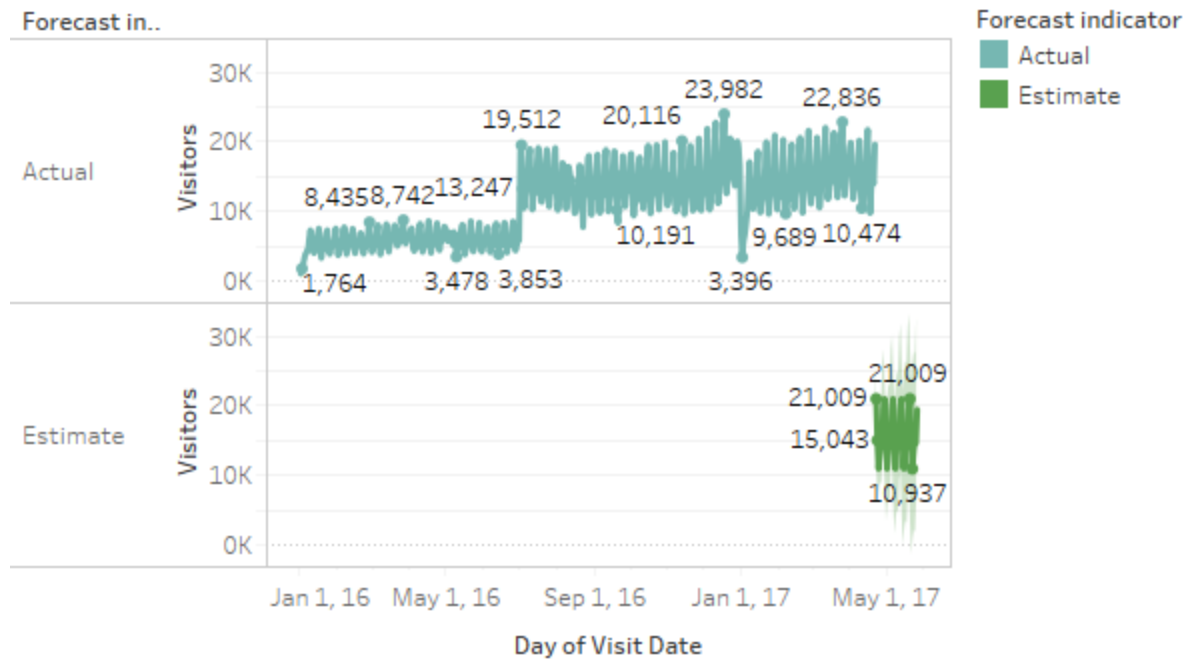
Median of Visitors for each Visit Date Weekday. Color shows sum of Visitors.

Inferences Drawn:

- Above analysis shows that new restaurants being added to the AIR data base.
- The number of guests per visit per restaurant per day are at most 19
- Friday and Saturday seems to be the most popular days , Monday and Tuesday have the least numbers of average visitors.
- December is the most popular month for restaurant visits. During Mar - May 2016 more guests visited the restaurant.

Here forecast for next five months is done

forecasting(green) Number of guest per day



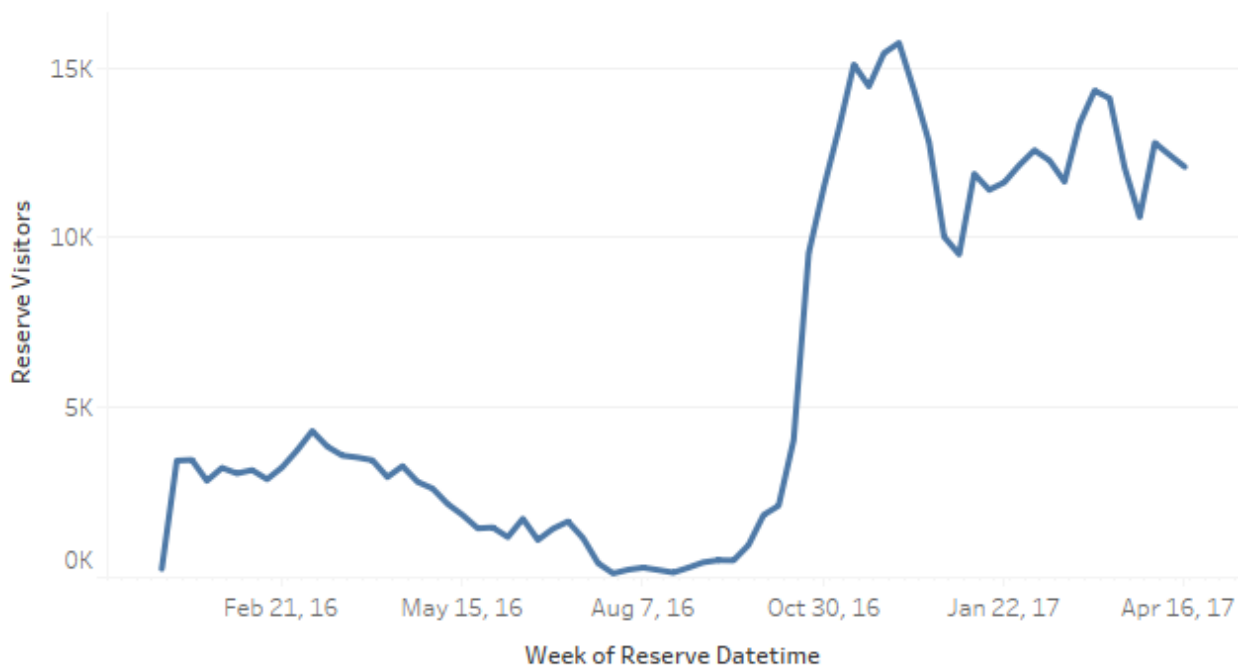
The trend of sum of Visitors (actual & forecast) for Visit Date Day broken down by Forecast indicator. Color shows details about Forecast indicator. The marks are labeled by sum of Visitors (actual & forecast) .

Inferences Drawn:

- Forecast is following the same trend of last few months.

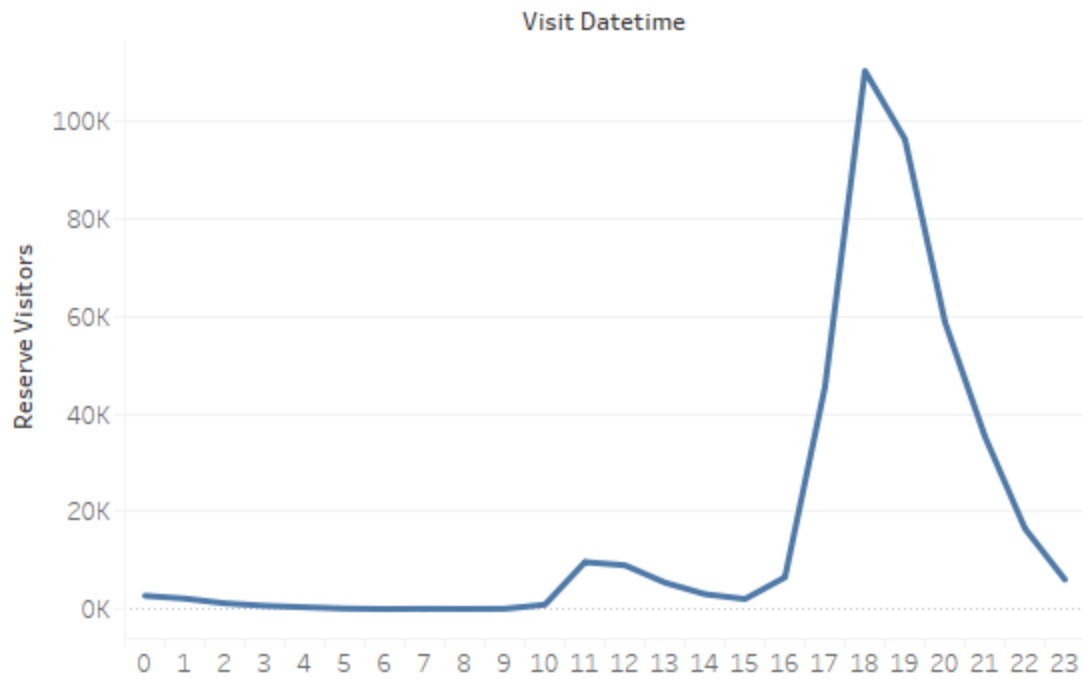
AIR RESERVATION

Number of Reservation per day



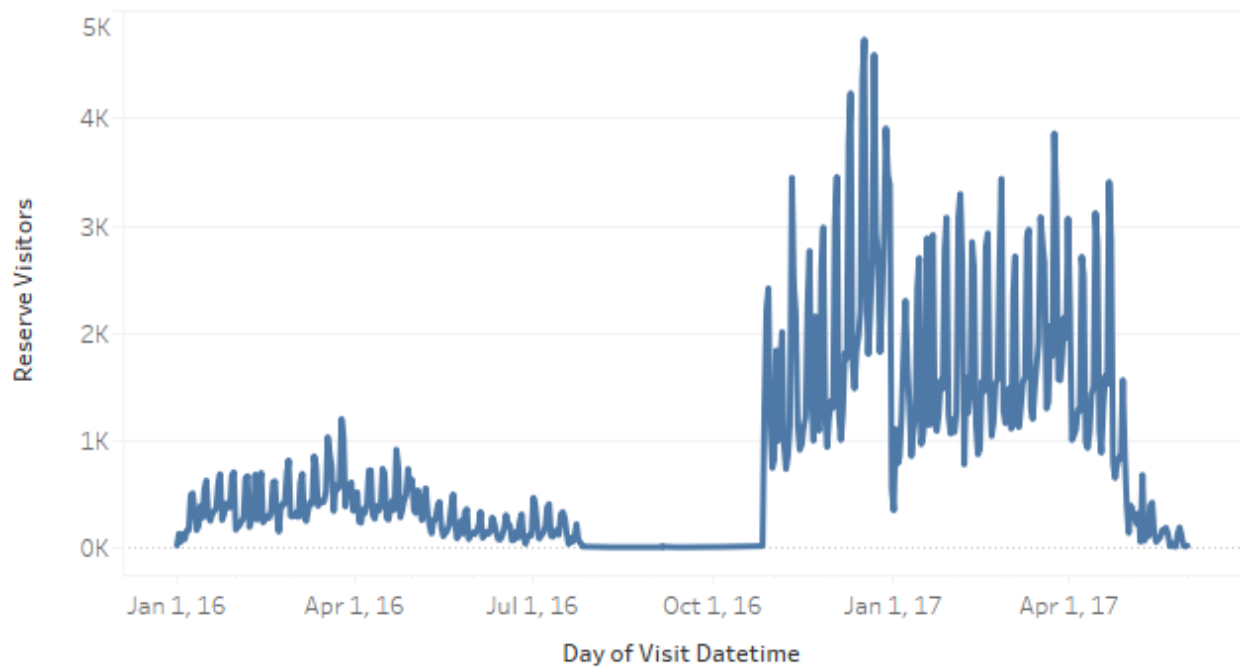
The trend of sum of Reserve Visitors for Reserve Datetime Week.

visit timing



The trend of sum of Reserve Visitors for Visit Datetime Hour.

visit



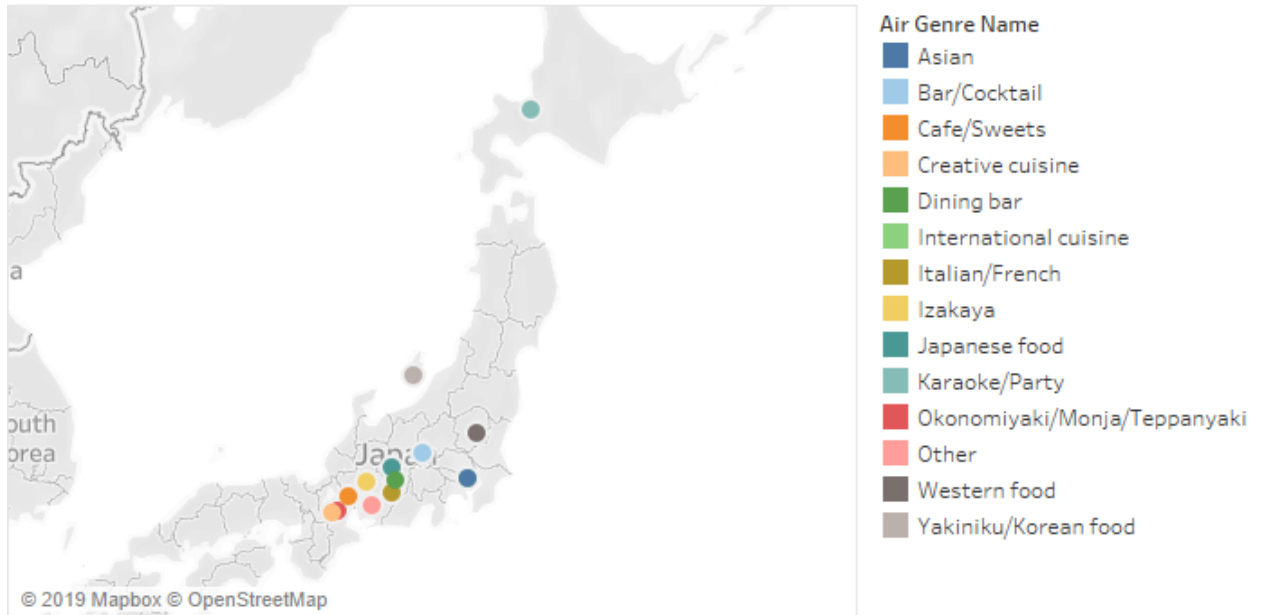
The trend of sum of Reserve Visitors for Visit Datetime Day.

Inferences Drawn:

- Very few reservations are made till october 2016 through the air system and after that reservations are increased.
- Most of the reservation are done for dinner.

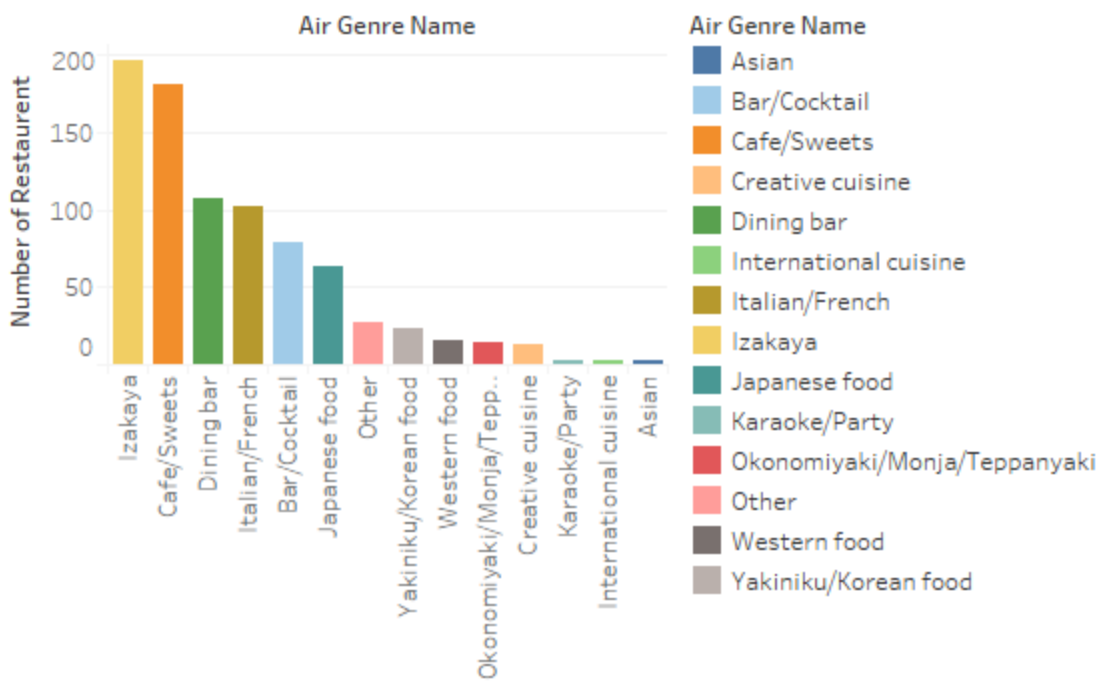
AIR STORE

genre location

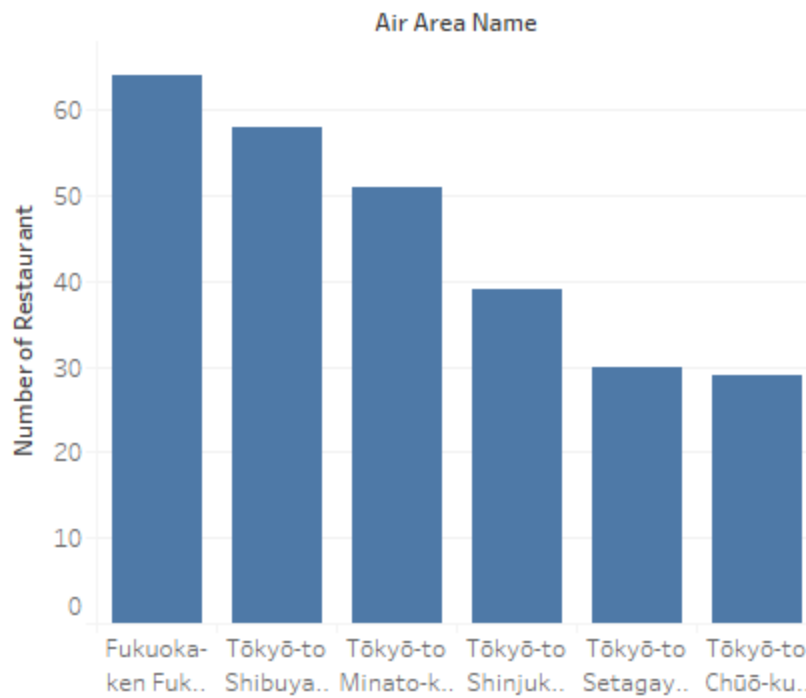


Map based on average of Longitude and average of Latitude. Color shows details about Air Genre Name.

Genre count



Sum of Number of Records for each Air Genre Name. Color shows details about Air Genre Name.



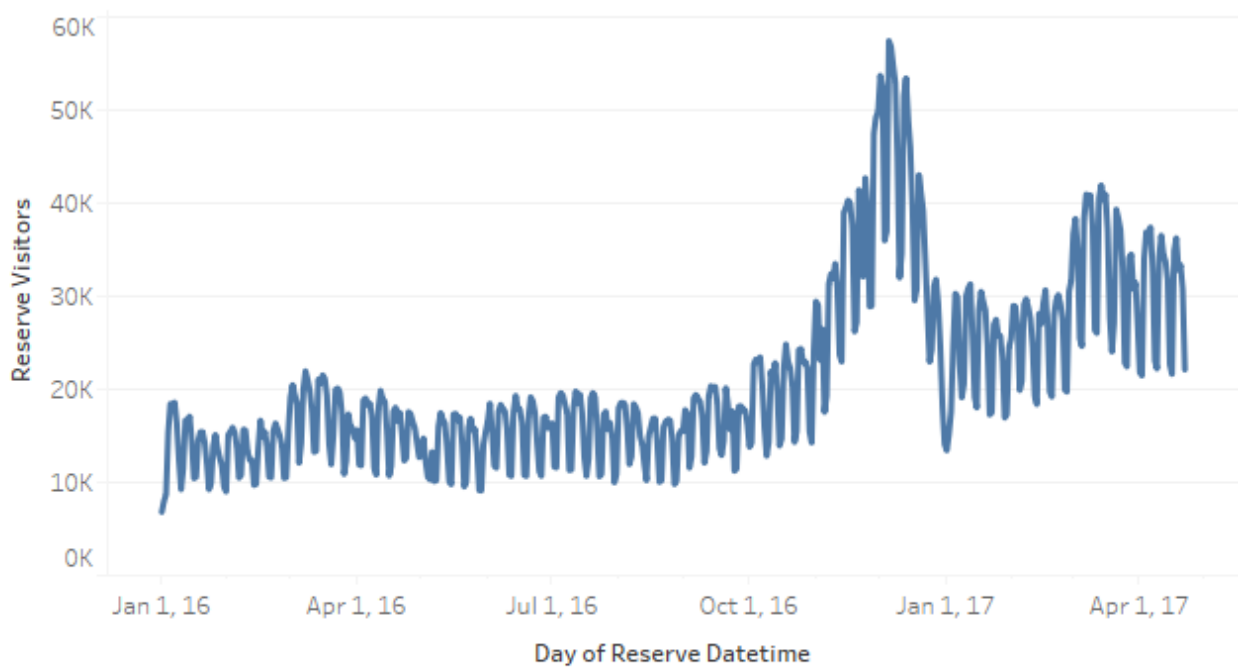
Sum of Number of Records for each Air Area Name. The view is filtered on sum of Number of Records, which ranges from 28 to 64 and keeps Null values.

Inferences Drawn:

- There are lots of Izakaya and café/sweets restaurant and very few international cuisine and Asian in data set.
- Above data set belongs to Japan.
- Fukuoka and Tokyo areas have the most number of air restaurants per area.

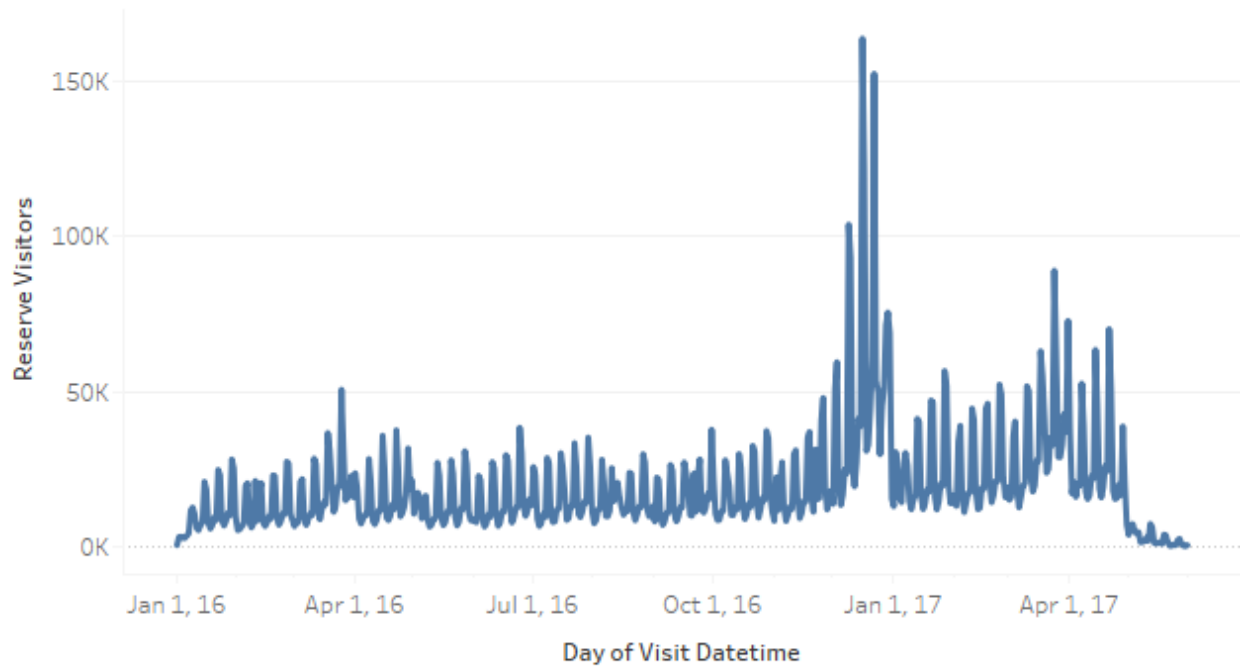
HPG RESERVE

Day wise resevation



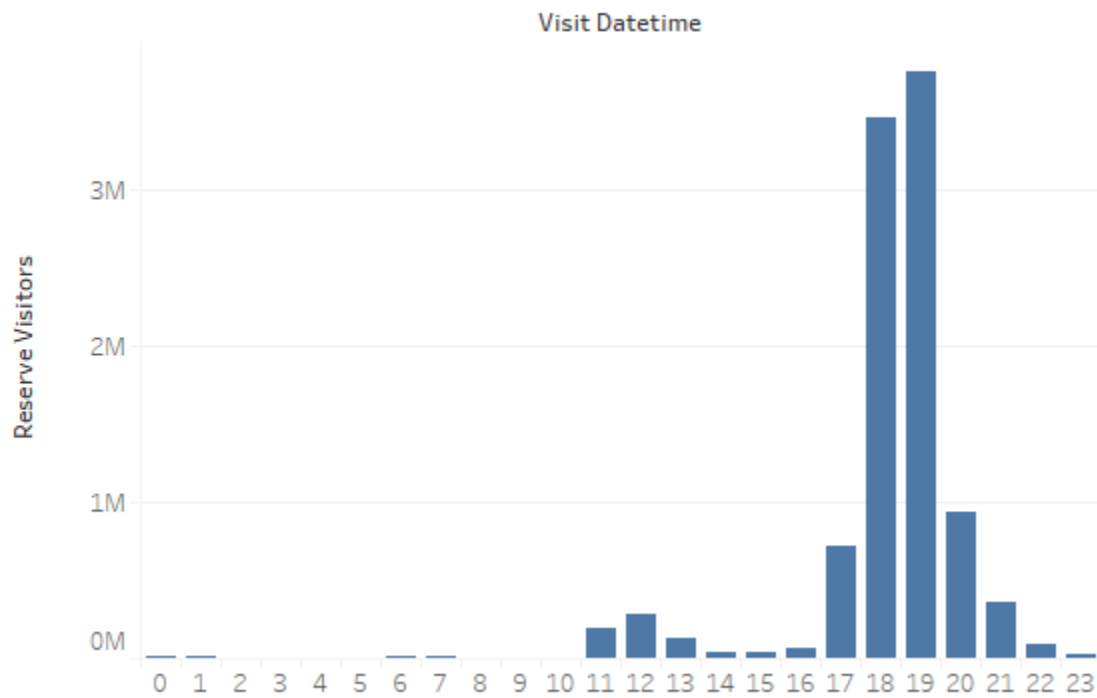
The trend of sum of Reserve Visitors for Reserve Datetime Day.

Day wise visit



The trend of sum of Reserve Visitors for Visit Datetime Day.

Visit time



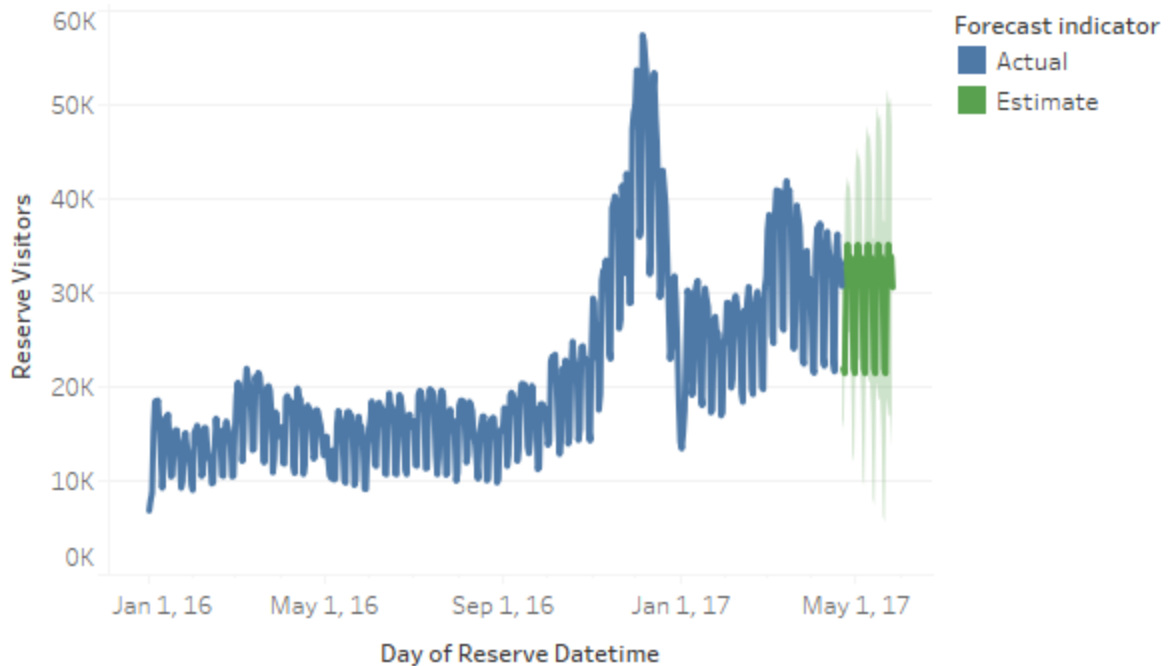
Sum of Reserve Visitors for each Visit Datetime Hour.

Inferences Drawn:

- Number of reservation are rapidly increased in December 2016 , so visitors are also increased in December and first quarter of January
- Most of the reservation are made for dinner

Here is the prediction

Day wise resevation



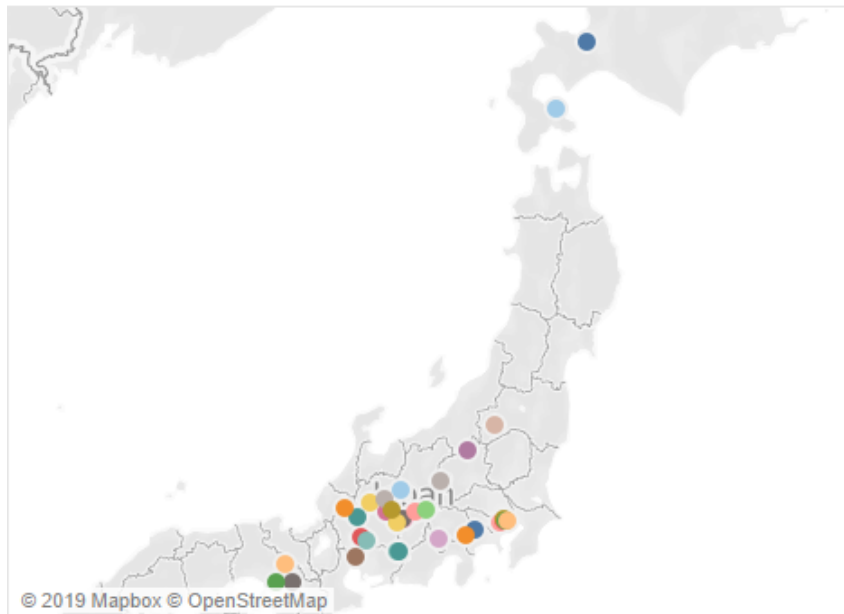
The trend of sum of Reserve Visitors (actual & forecast) for Reserve Datetime Day.
Color shows details about Forecast indicator.

Inferences Drawn:

- Above prediction shows that number of visitors will decrease little bit but it will not vary too much , more or less it is following same pattern of last 2 weeks.

HPG STORE

HPG genre location

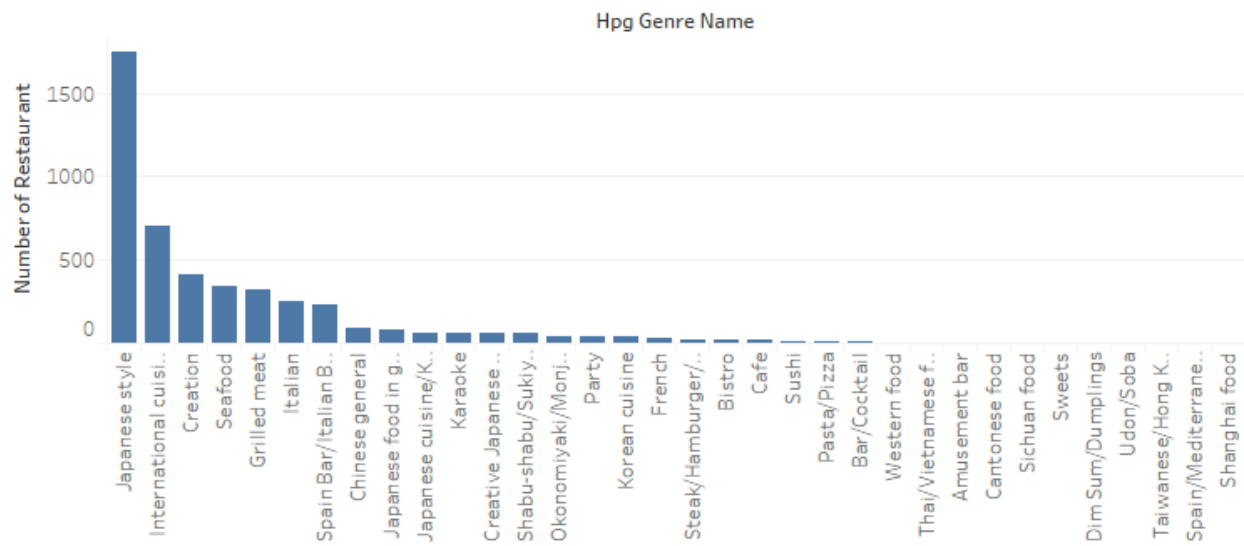


Map based on average of Longitude and average of Latitude. Color shows details about Hpg Genre Name.

Hpg Genre Name

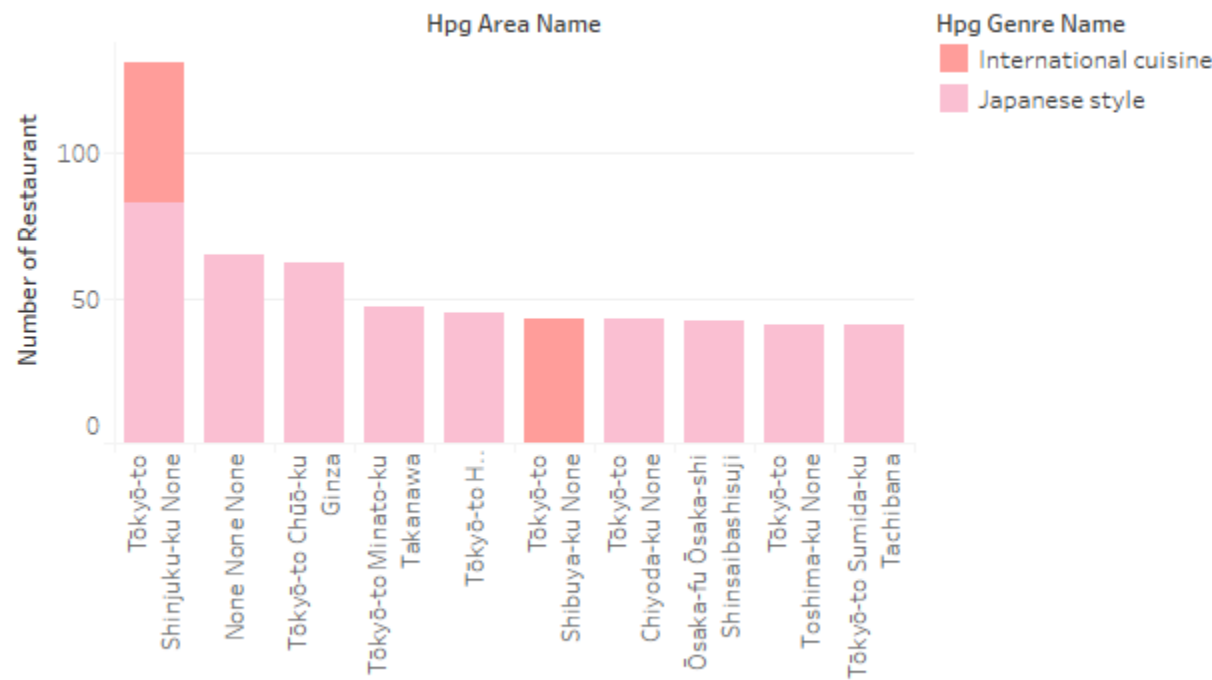
- Amusement bar
- Bar/Cocktail
- Bistro
- Cafe
- Cantonese food
- Chinese general
- Creation
- Creative Japanese food
- Dim Sum/Dumplings
- French
- Grilled meat
- International cuisine
- Italian
- Japanese cuisine/Kaiseki
- Japanese food in general
- Japanese style
- Karaoke
- Korean cuisine
- Okonomiyaki/Monja/Teppanyaki
- Party
- Pasta/Pizza
- Seafood
- Shabu-shabu/Sukiyaki
- Shanghai food
- Sichuan food
- Spain Bar/Italian Bar
- Spain/Mediterranean cuisine
- Steak/Hamburger/Curry
- Sushi
- Sweets
- Taiwanese/Hong Kong cuisine
- Thai/Vietnamese food
- Udon/Soba
- Western food

genre count



Sum of Number of Records for each Hpg Genre Name.

Area wise count



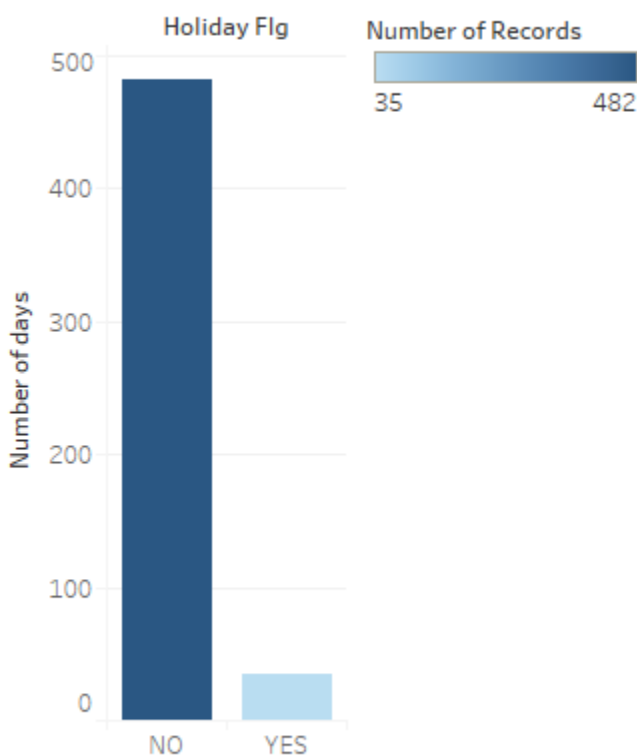
Sum of Number of Records for each Hpg Area Name. Color shows details about Hpg Genre Name. The view is filtered on sum of Number of Records, which ranges from 40 to 83 and keeps Null values.

Inferences Drawn:

- The *HPG* description contains a larger variety of *genres* than in the *AIR* data.
- There are lots of Japanese style restaurant followed by International cuisine and very few café.
- Tokyo-to has the most number of *HPG* restaurants per area.

DATE INFO

Holiday count



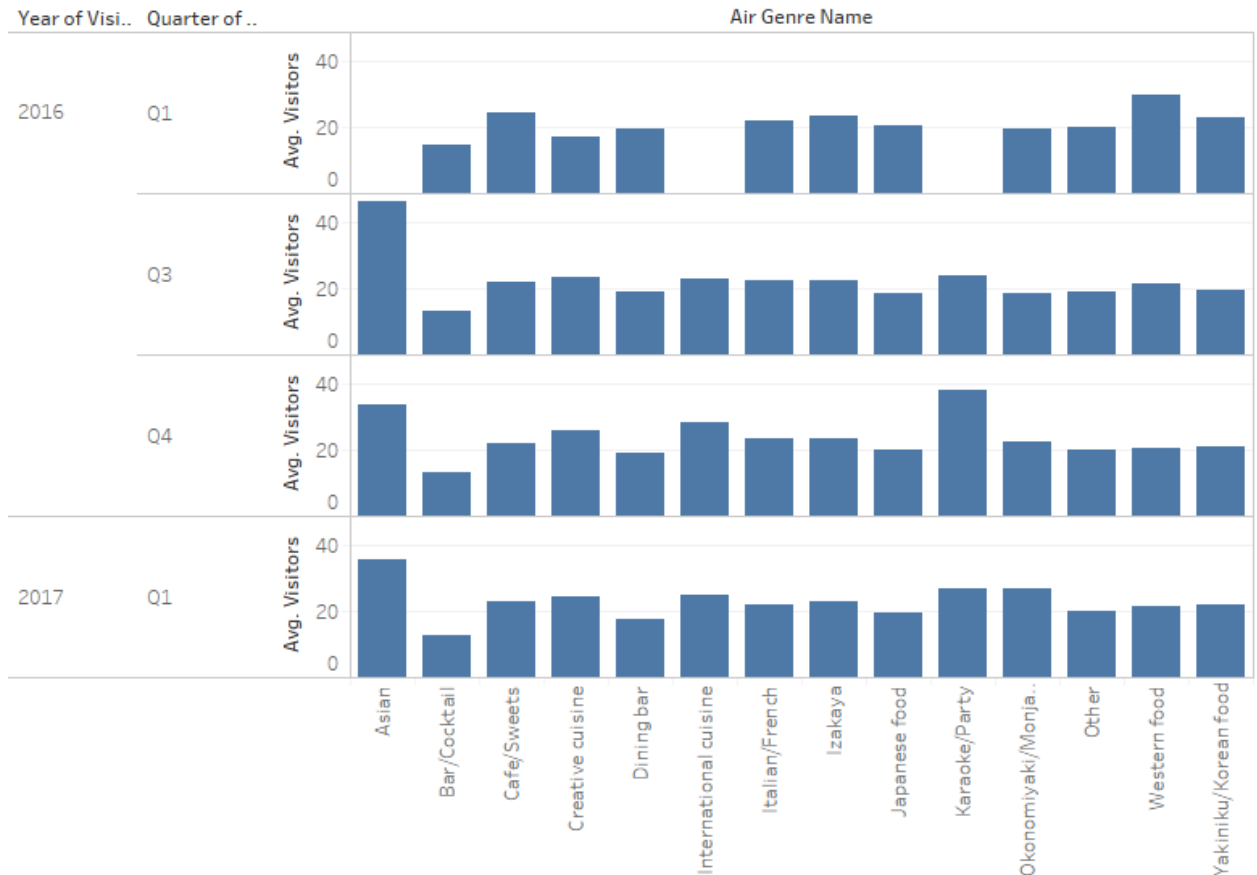
Sum of Number of Records for each Holiday Flg. Color shows sum of Number of Records.

Inferences Drawn:

- There are 6.8% holidays in our data set.

AVG NUMBER OF VISITORS PER CUISINE IN EACH QUARTER IN AIR DATA

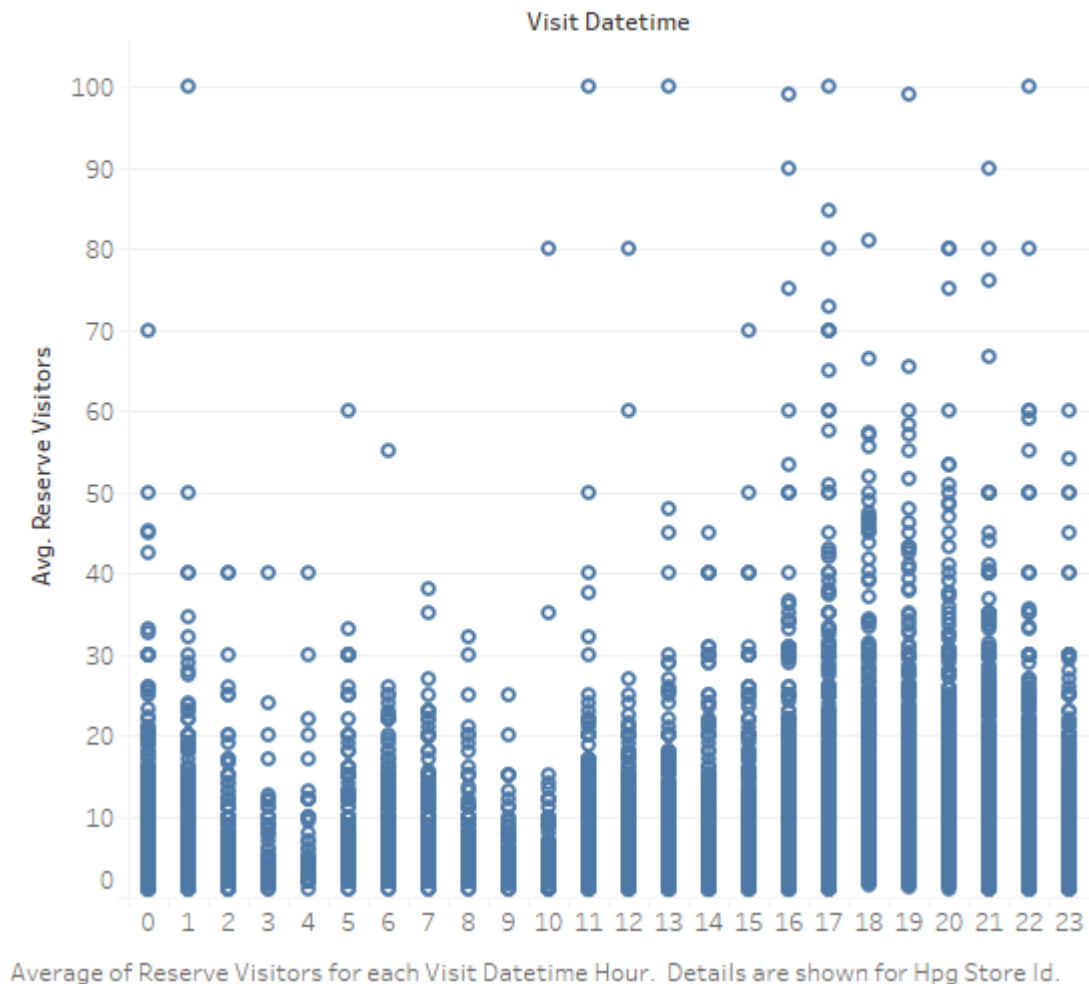
Avg number of visitors per cuisine in each quarter



Average of Visitors for each Air Genre Name broken down by Visit Date Year and Visit Date Quarter. The view is filtered on Visit Date Quarter, which keeps Q1, Q3 and Q4.

AVERAGE NUMBER OF RESERVATIONS IN STORES ON DIFFERENT TIME SLOTS OF THE DAY IN HPG DATA SOURCE

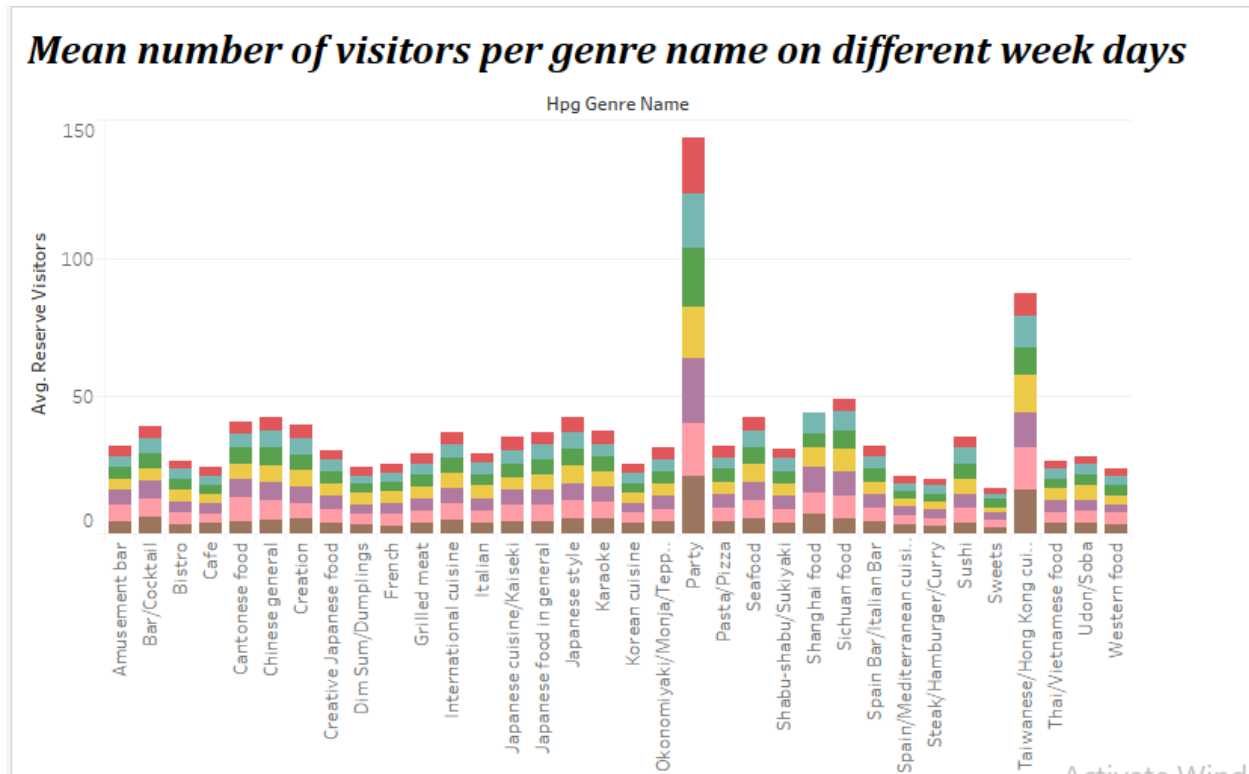
average number of reserve visitors in different restaurant on different time(0:00-24:00)



Inferences Drawn:

- Most of the reserved visitor visited the restaurant between 18:00 and 20:00

MEAN NUMBER OF VISITORS PER GENRE NAME ON DIFFERENT WEEK DAYS FOR HPG DATA SET



Inferences Drawn:

- Most of the visitors visit the restaurant for the party purpose.
- On Thursday average number of people are highest (23.5) for party genre.

MEAN NUMBER OF VISITORS ON EACH WEEK DAYS FOR ALL THE RESTAURANTS IN HPG DATA SOURCE



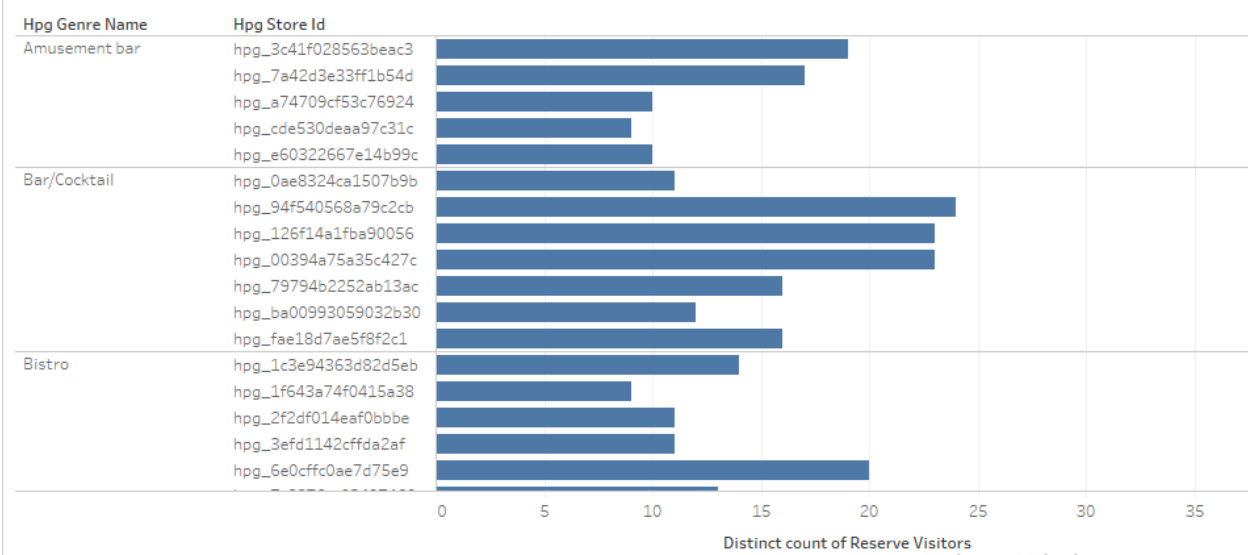
Inferences Drawn:

- On Wednesday average 99 and Sunday average 100 visitor visited at store id(hpg_3e66c088d8dd19fa)
- On Saturday average 100 visitor visited at store id(hpg_2e7f9b41ca801dc9)

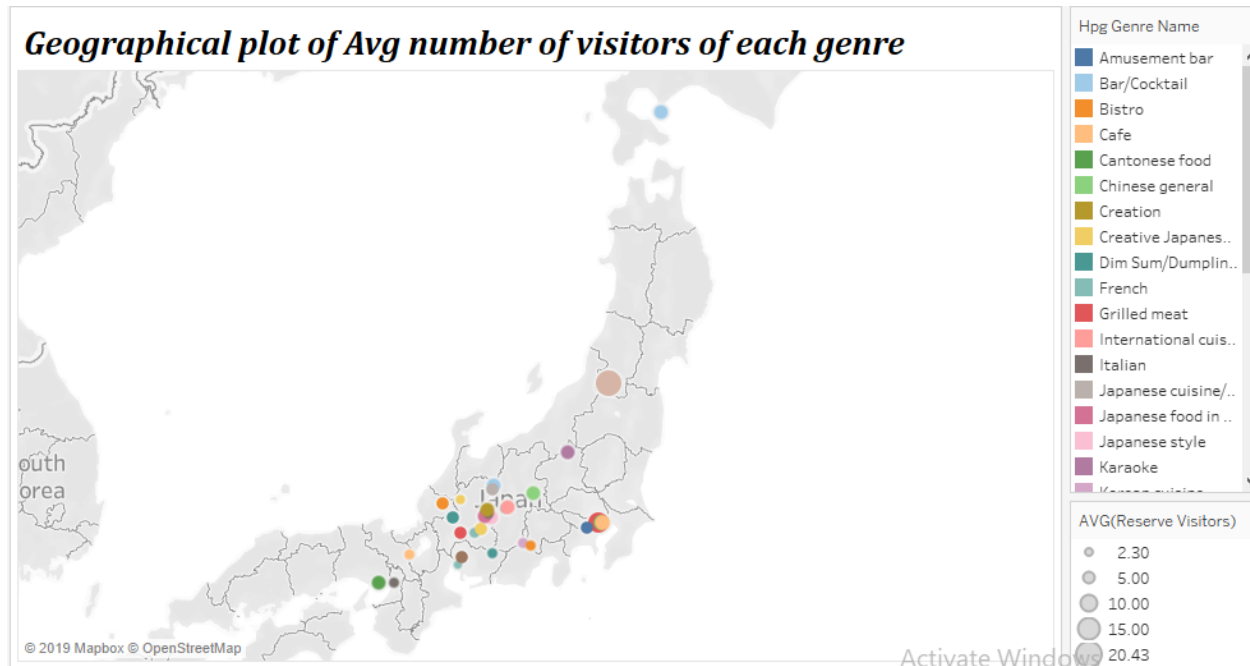
Above two restaurant were on high demand.

NUMBER OF RESERVED VISITORS PER RESTAURANT (GENRE WISE) FOR HPG DATA SOURCE

Number of Reserved visitors per restaurant (Genre wise) for HPG Data Source



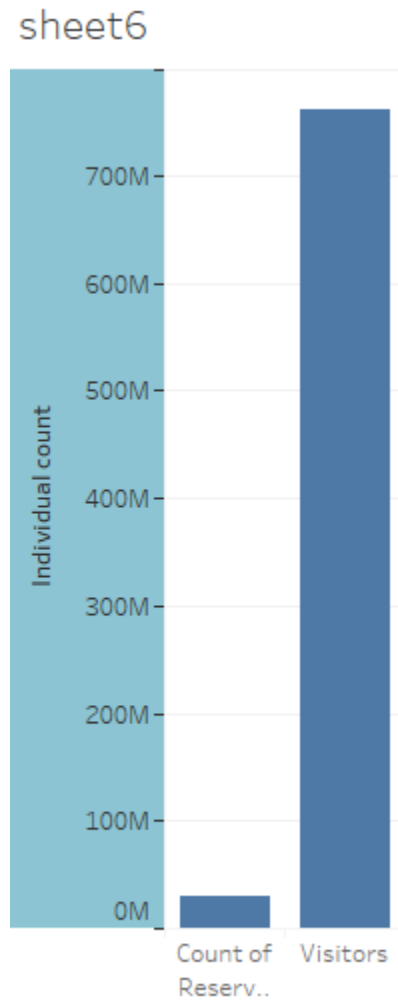
GEOGRAPHICAL PLOT OF AVG NUMBER OF VISITORS OF EACH GENRE IN HPG DATA SOURCE



Inferences Drawn:

- Maximum 20(average) person visited restaurant at latitude 37.977 , longitude 139.908 for party genre.
- Followed by 12(average) person visited restaurant at latitude 35.691 , longitude 139.701 for Taiwanese/hong kong cuisine genre.

ACTUAL VISITORS VERSUS RESERVED VISITORS IN AIR DATA SOURCE



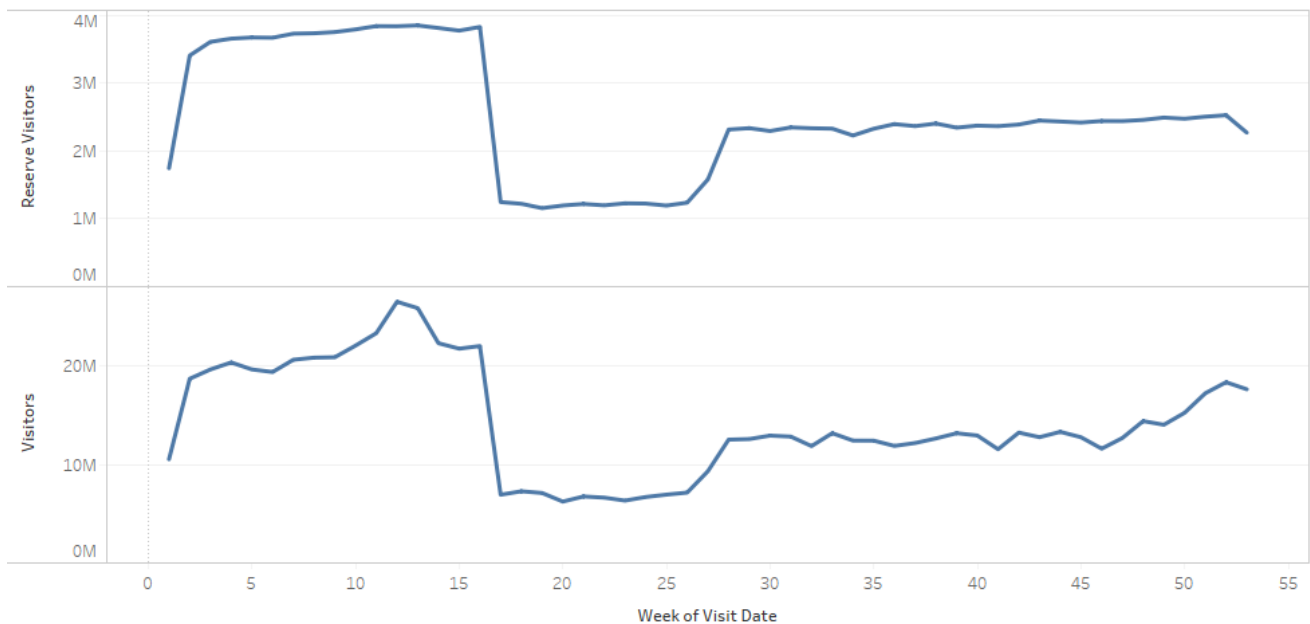
Count of Reserve Visitors and
Visitors.

Inferences Drawn:

- Most of the people like to visit the restaurants without prior reservations.

ACTUAL VERSUS RESERVED NUMBER OF VISITOR FOR ALL THE WEEKS IN THE TIME SPAN OF JAN 2016 - MOST OF APR 2017 FOR AIR DATA SOURCE

Sheet 7



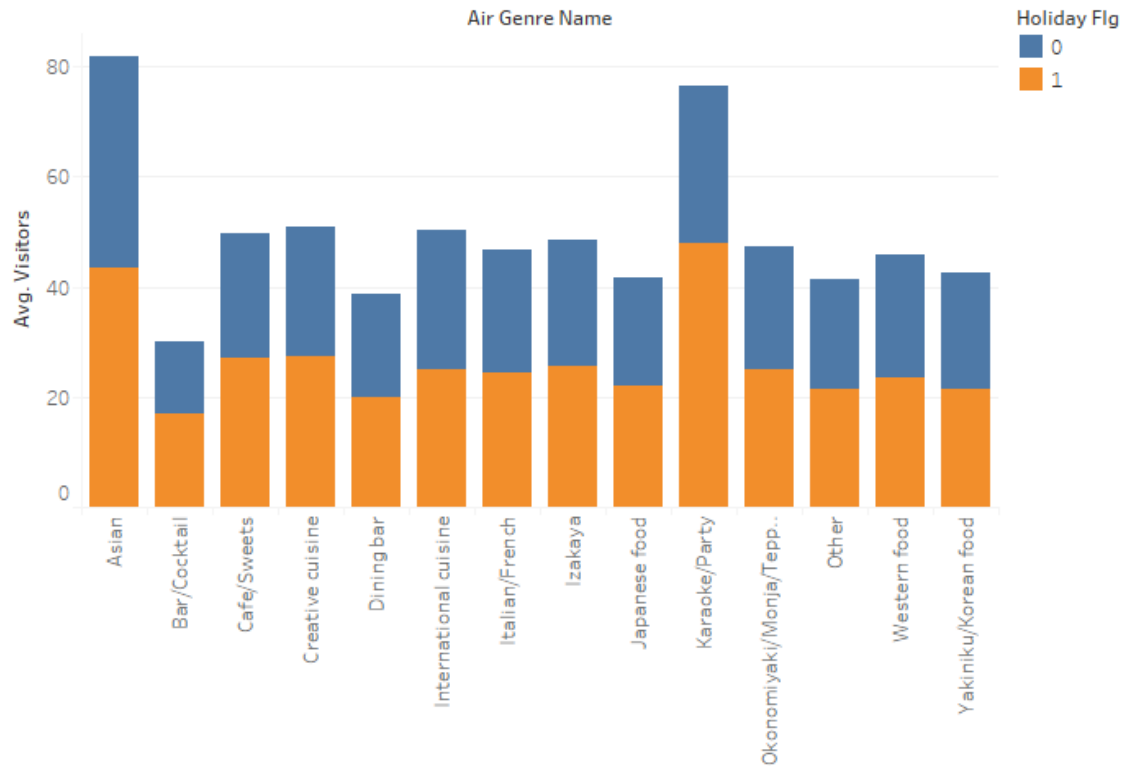
The trends of sum of Reserve Visitors and sum of Visitors for Visit Date Week.

Inferences Drawn:

- There is drastic fall in the number of reserved as well as unreserved visitors in time span of 16th to 25th week number.

Average number of visitors versus public holidays

average number of visitors on holidays and non holidays for genre



Average of Visitors for each Air Genre Name. Color shows details about Holiday Flg.

Inferences Drawn:

- • Karaoke/Party is the most chosen genre during holiday (average 56.5) followed by Asian (avg=43.5)
