

Presented by Mark Maged

Analysis of Hotel Bookings

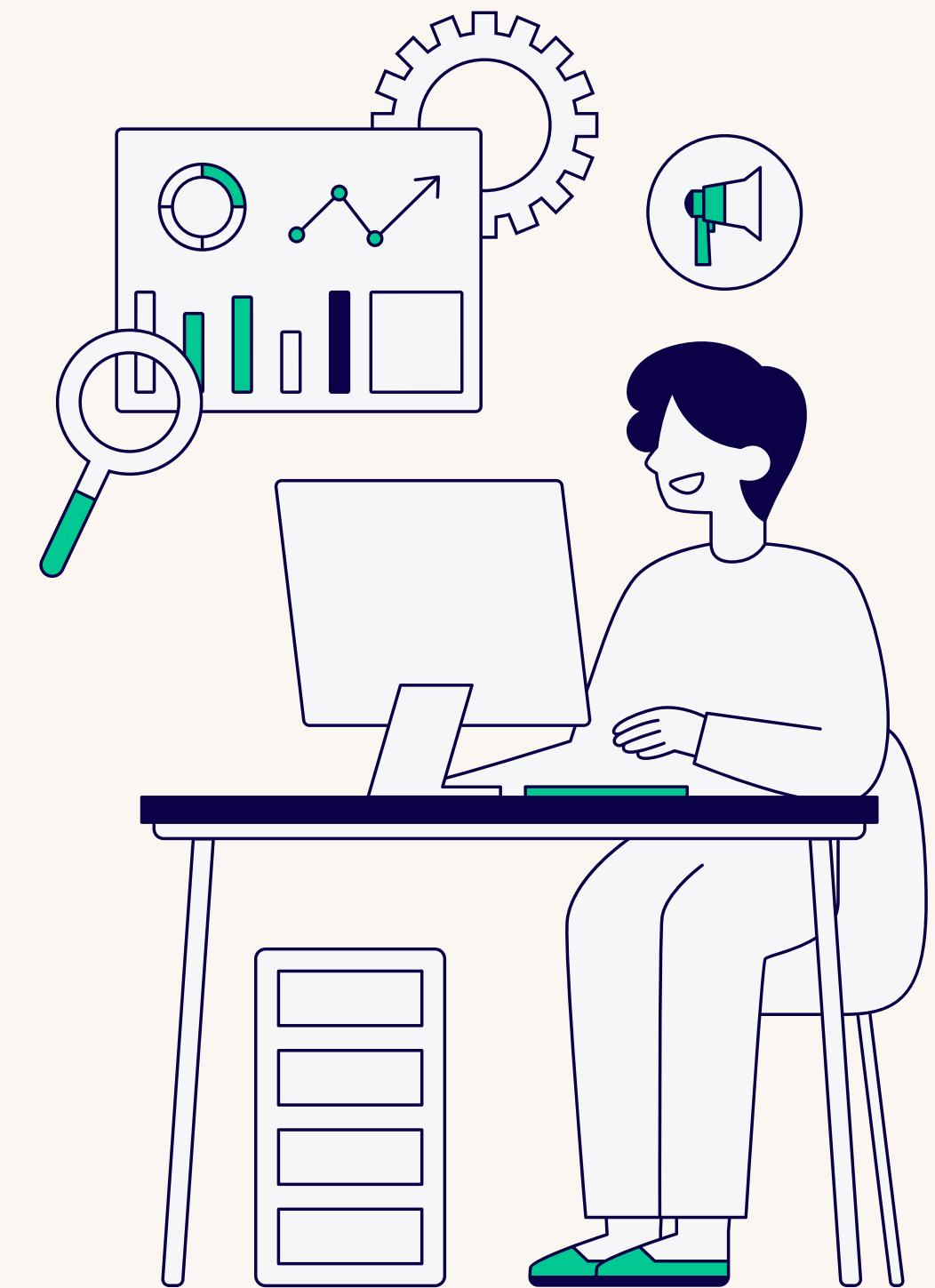


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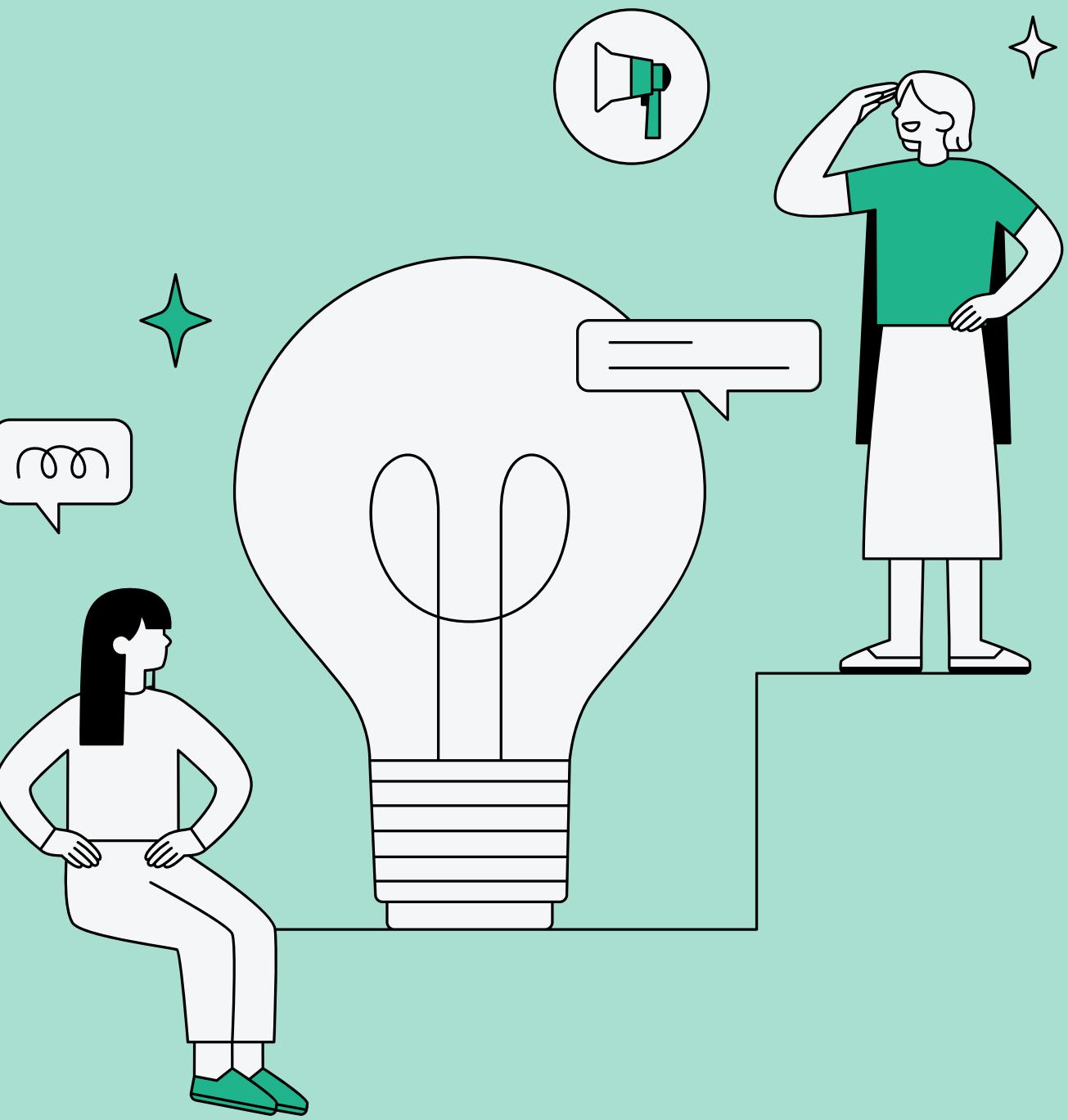
1. General Analysis

- Lead time analysis
- Lead time VS. cancelations
- Date of booking analysis

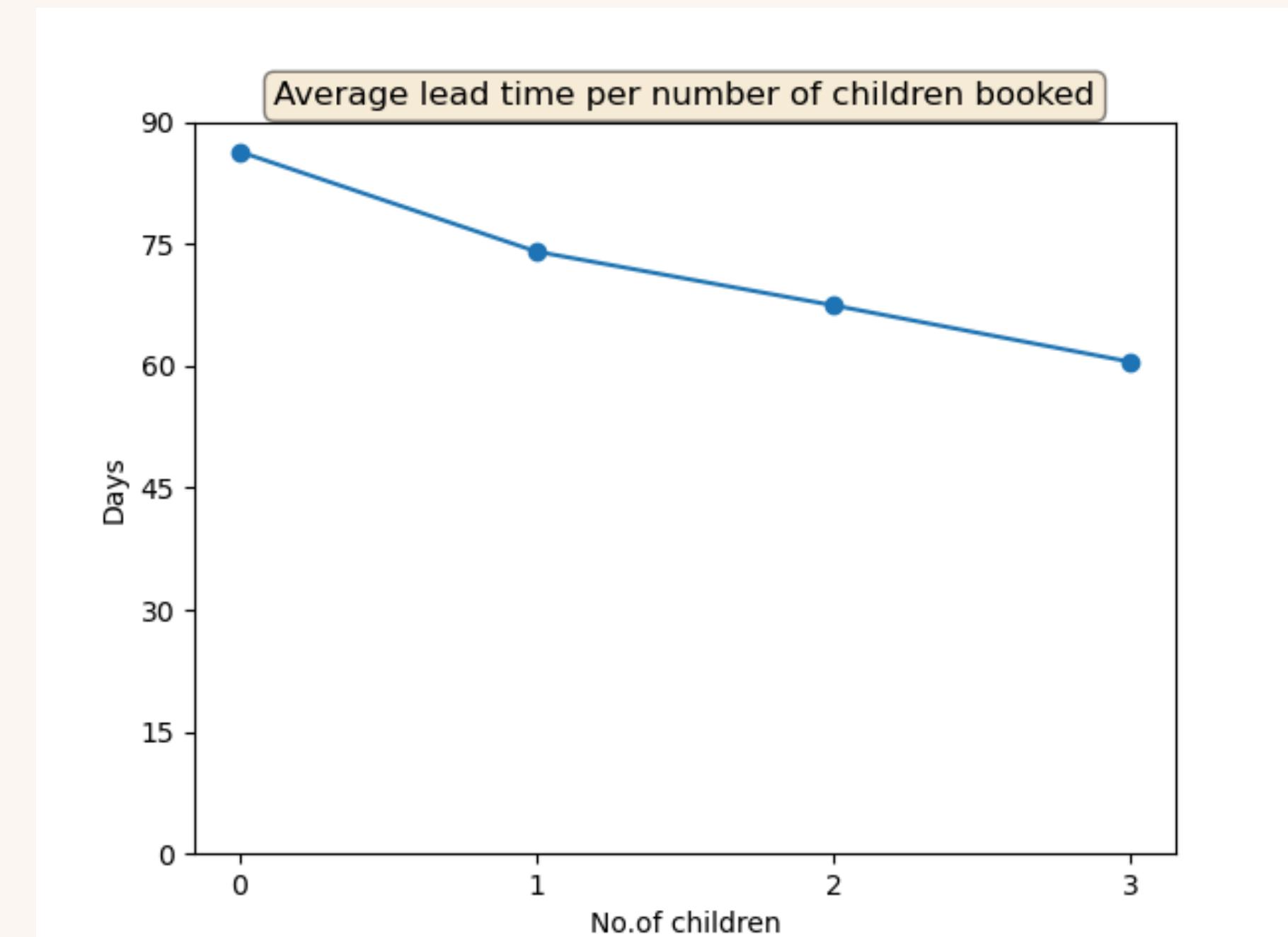
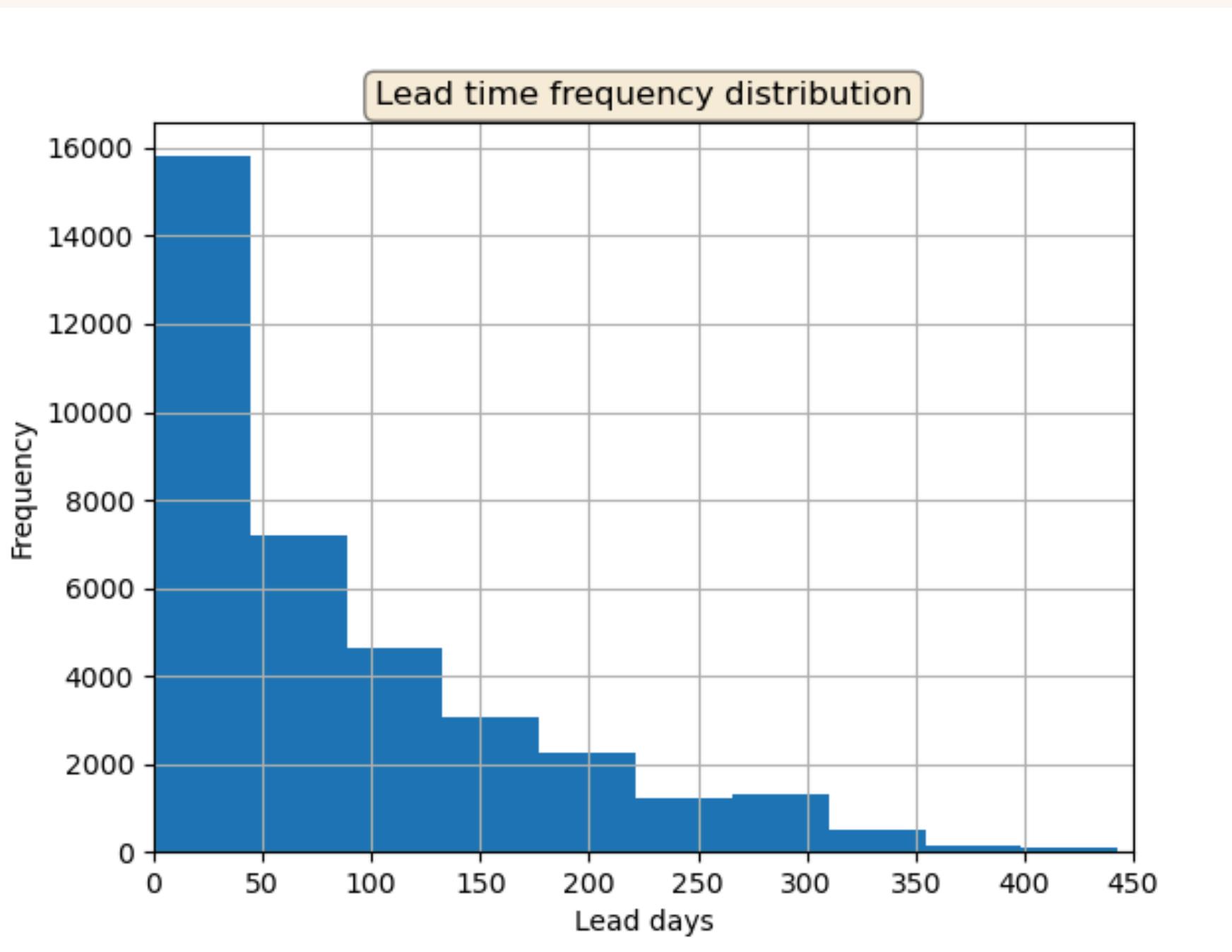
2. Market Segment Analysis

- Preferred meal plan and room type
- Bookings
- Canceled bookings
- Parking space requests
- Visit analysis
- Revenue Analysis

3. Appendix



lead time analysis



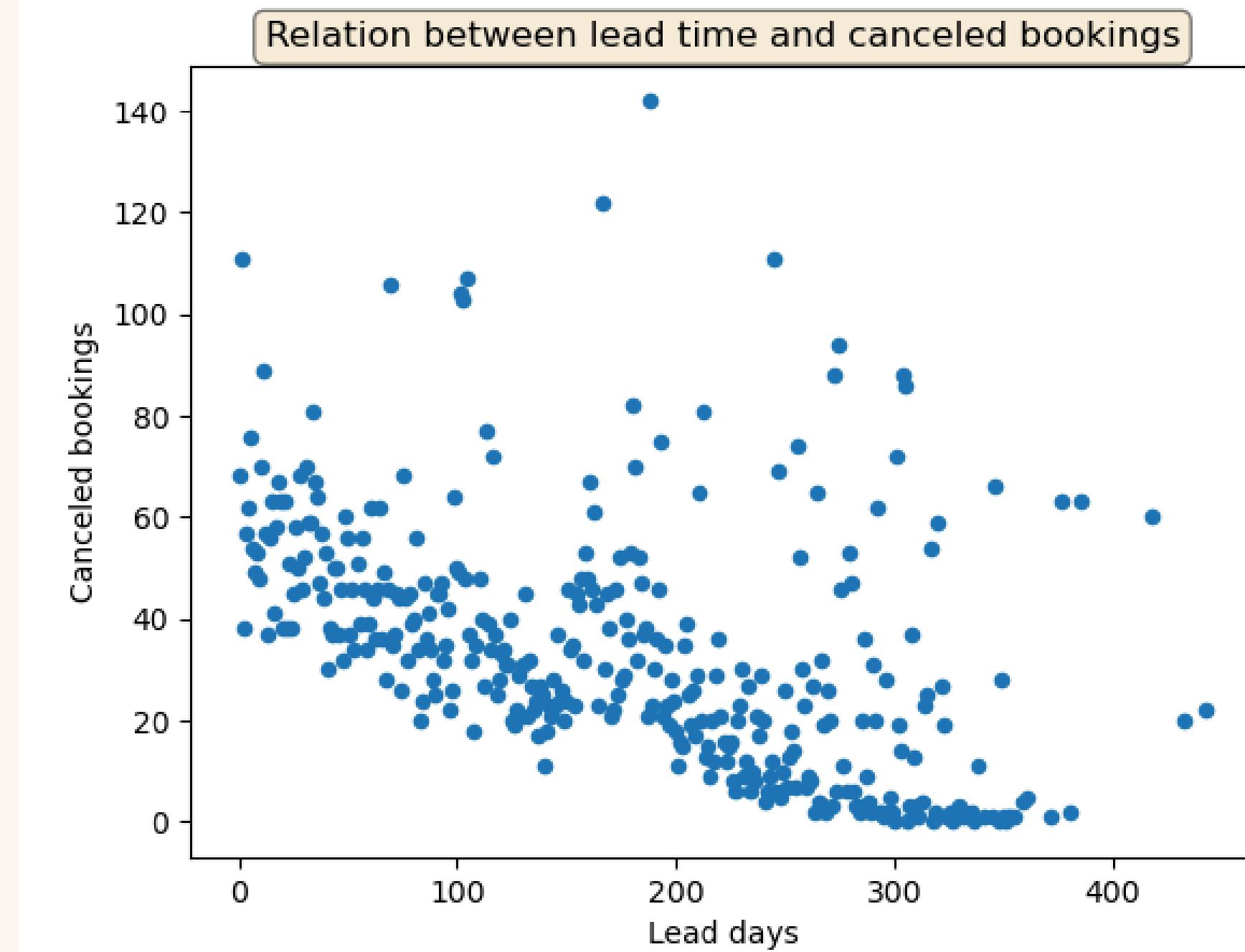
* bookings with 9 and 10 children were dropped from this chart as they were considered outliers

- Average lead time before checking in is 85 days
- On Average, the more children booked, the less lead time is given

Lead Time VS. Cancellations

There is moderate negative correlation between lead time and number of canceled bookings.

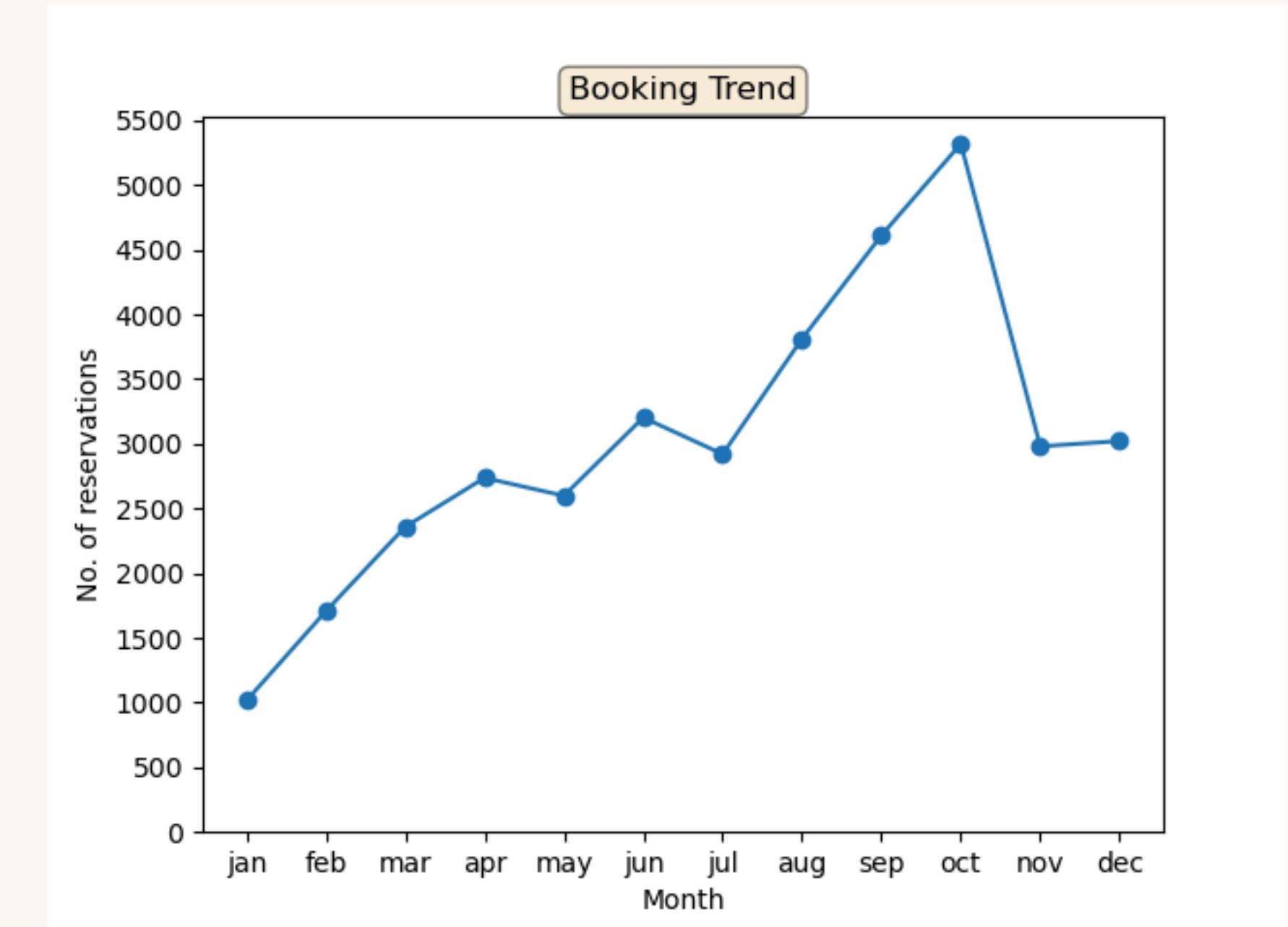
Which means when more lead days are given before checking in, less bookings are canceled.



Date of Booking Analysis

The number of bookings increases steadily starting from January and reaches its peak in October before dropping in November.

Autumn is the peak season for the hotel.



Market Segment Analysis

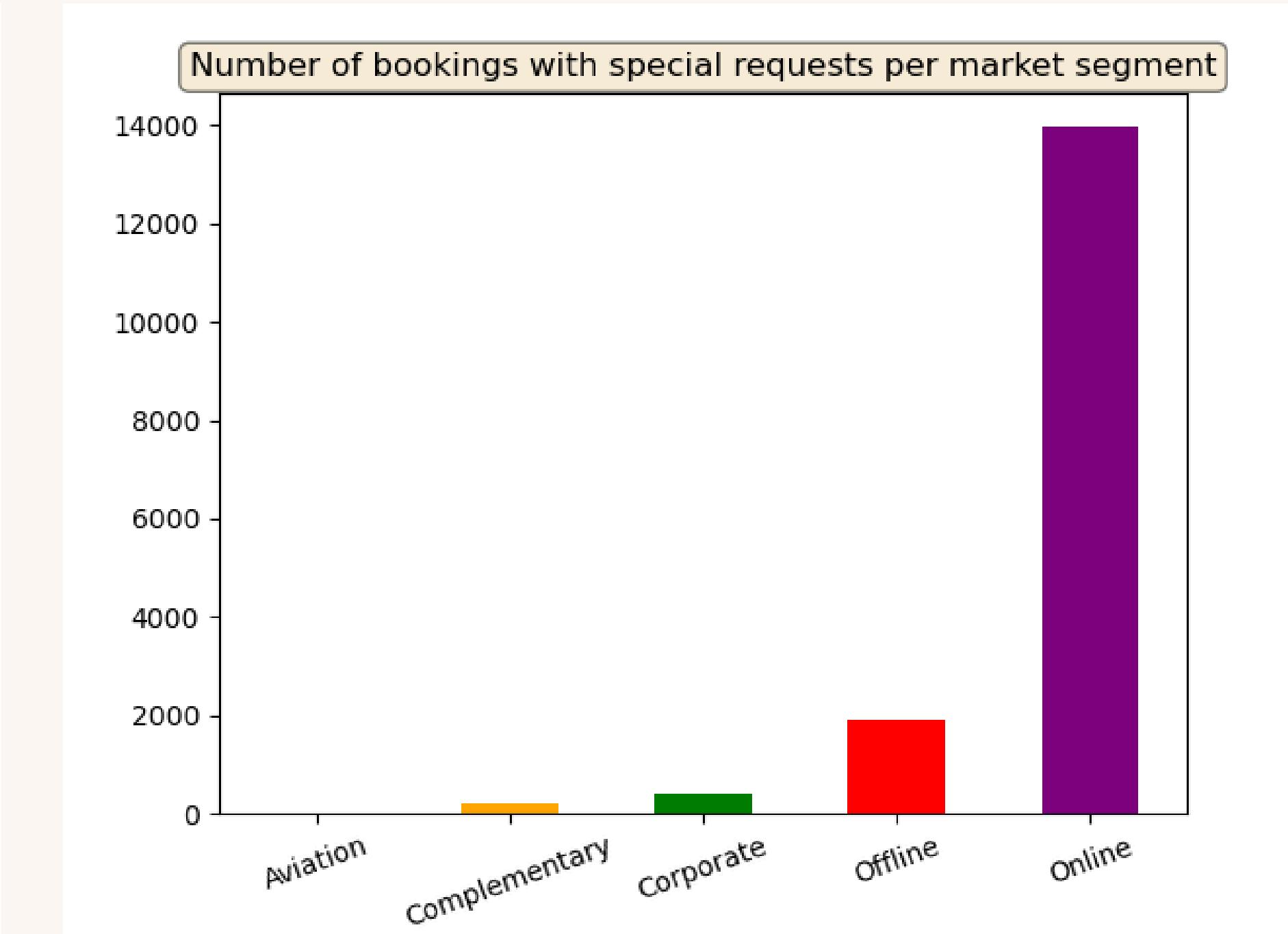
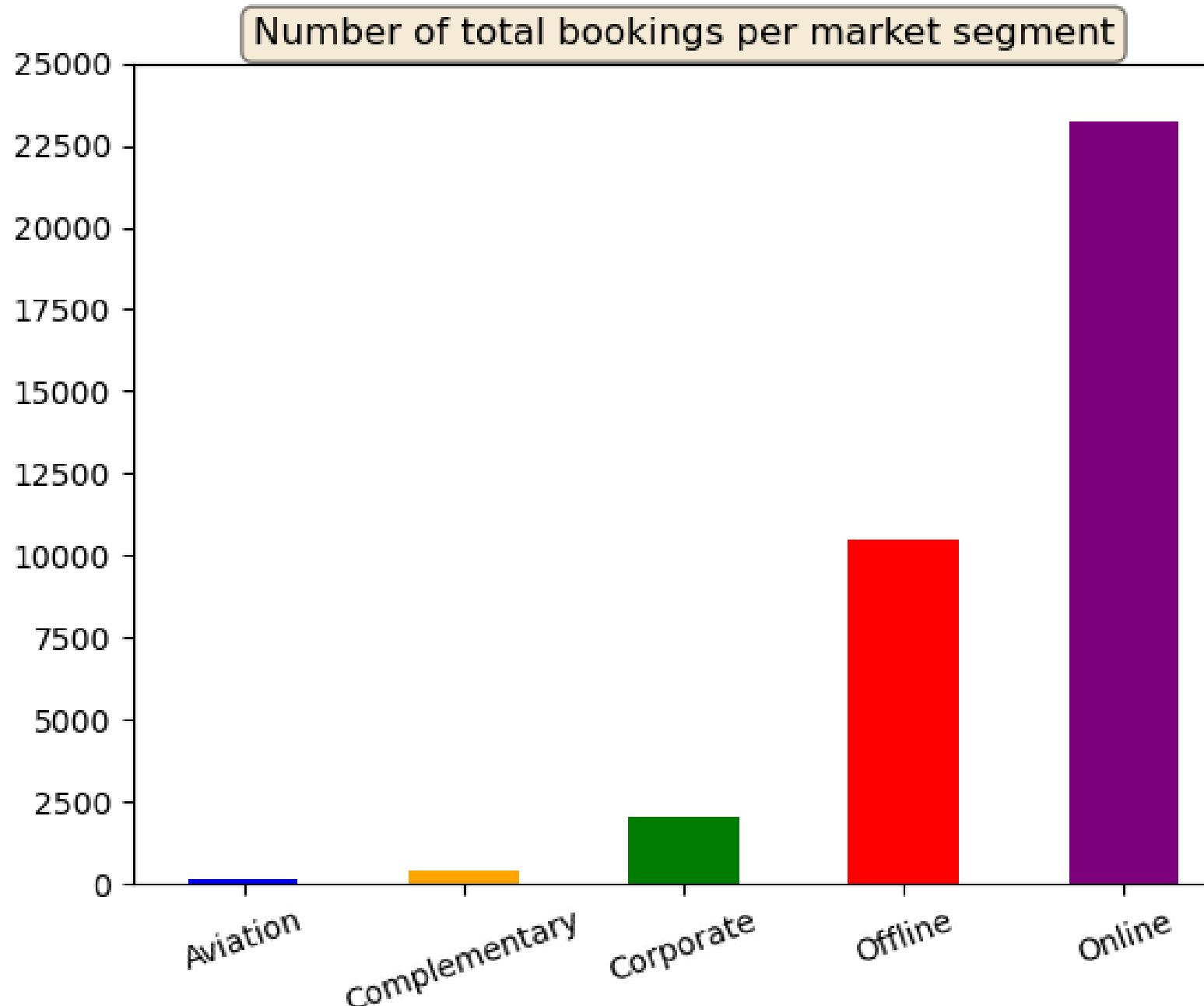
Preferred Meal Plan

Meal plan 1 was the preferred plan for all market segments.

Preferred Room Type

Room type 1 was the preferred room across all market segments, except for aviation bookings which preferred room type 4.

Bookings Analysis

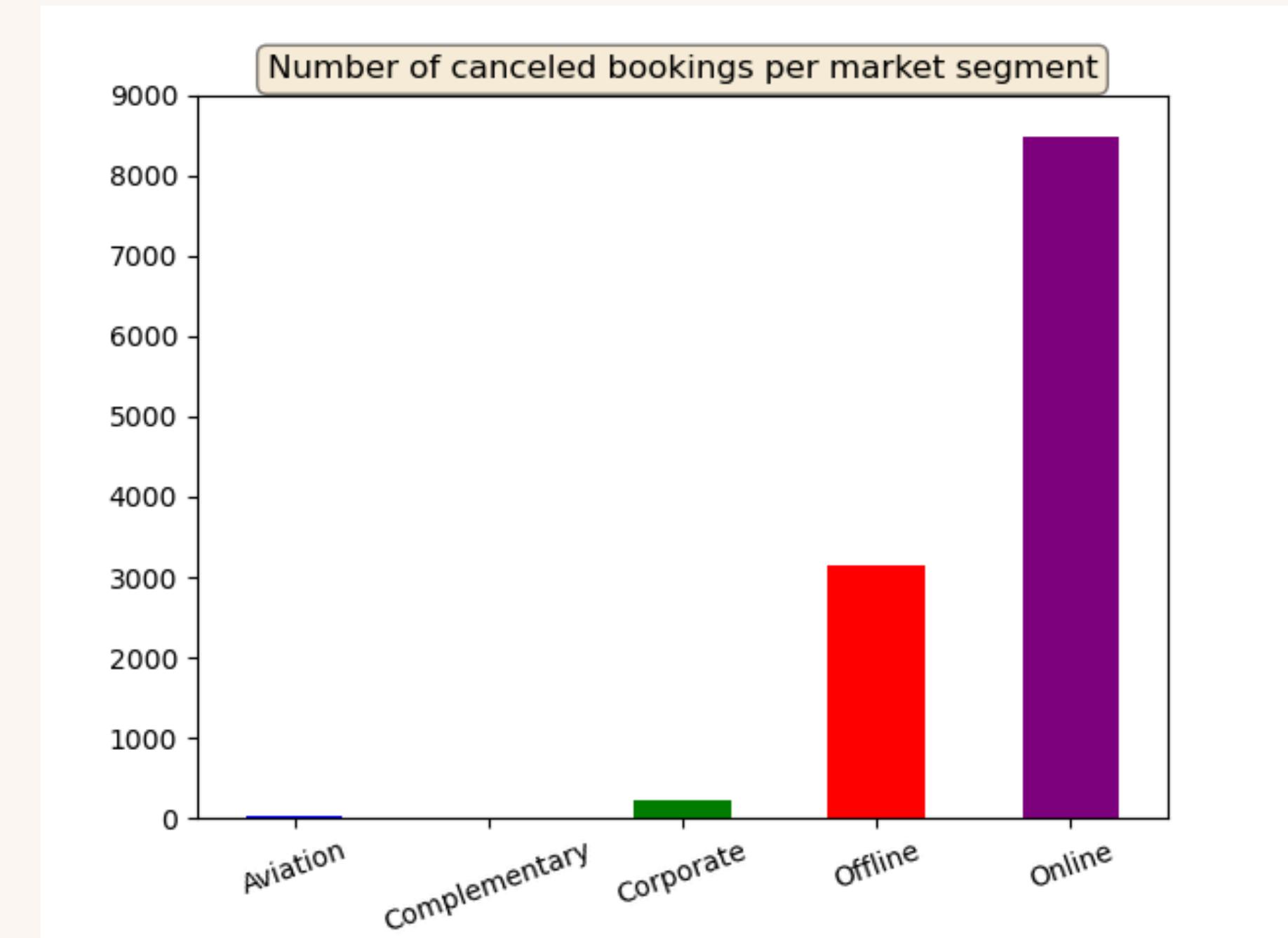


Most bookings are made online and they are the most likely to have a special request.

Canceled Bookings Analysis

Percentage of canceled bookings within each market segment:

- Aviation: 29.6%
- Complementary: 0%
- Corporate: 10.9%
- Offline: 29.9%
- Online: 36.5%



Percentage of bookings that asked for parking space within each market segment

Aviation

4.8%

Corporate

9.1%

Online

3.7%

Complementary

7.9%

Offline

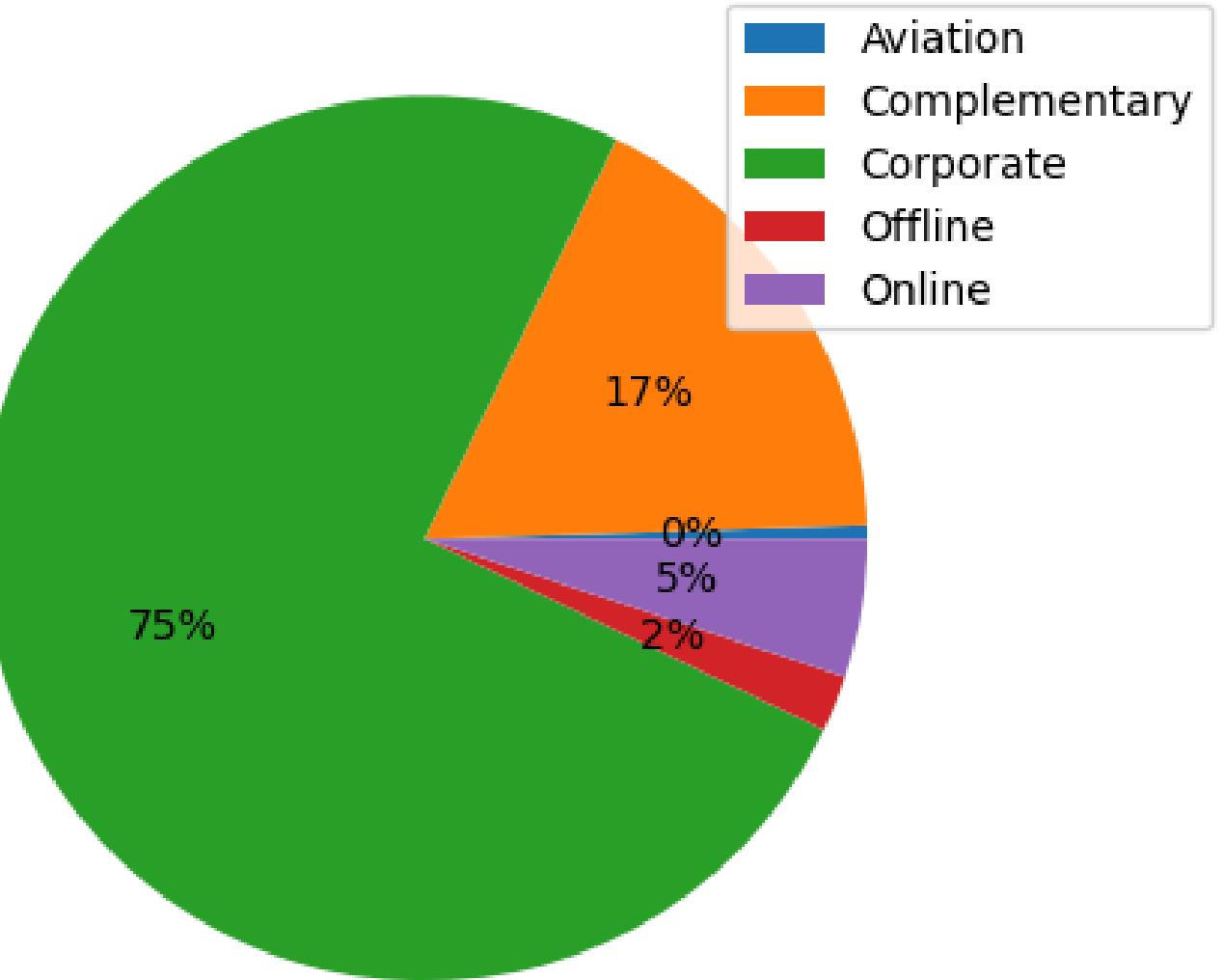
0.3%

Visit Analysis

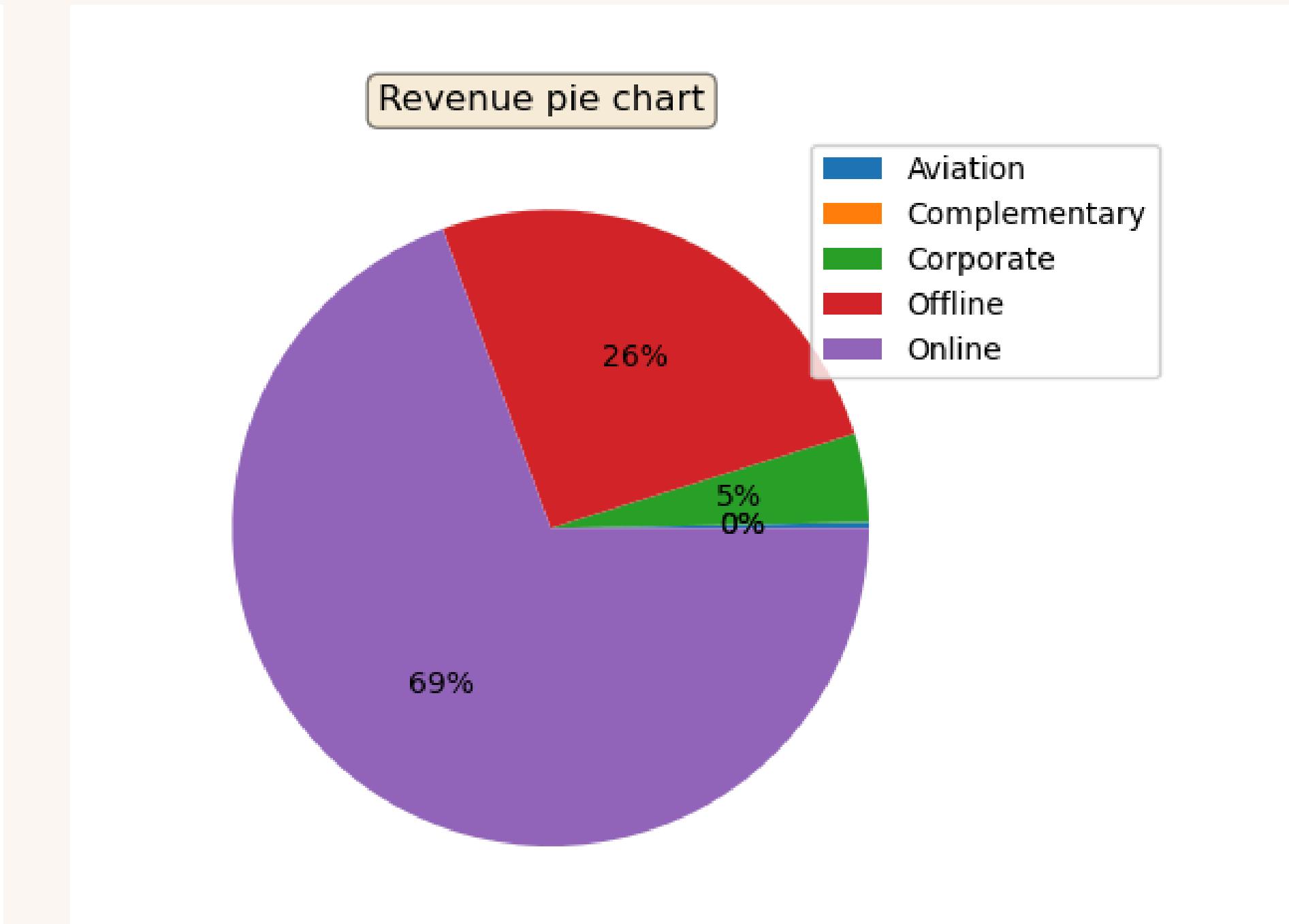
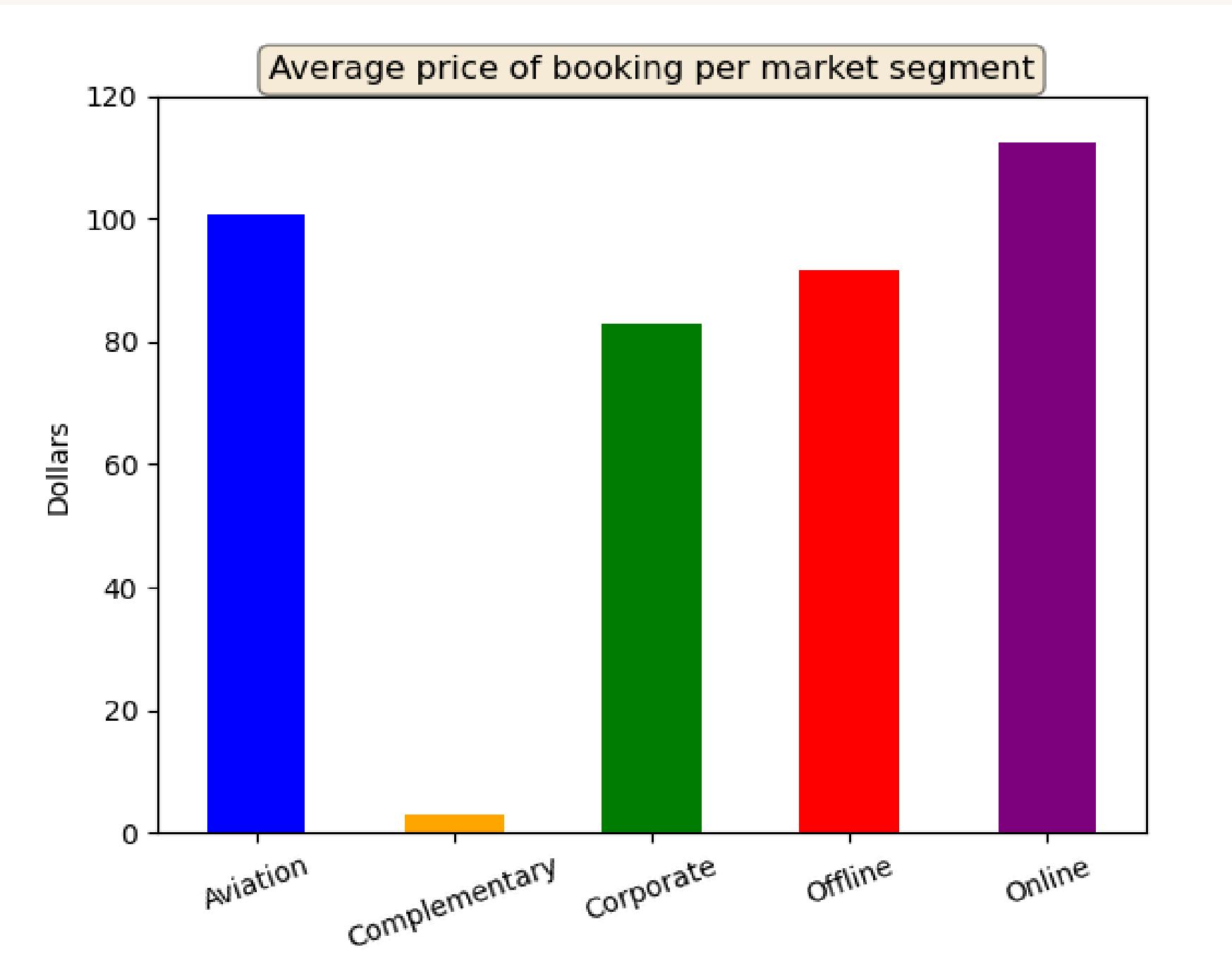
Average nights stayed per market segment:

- Aviation: 4 nights
- Complementary: 1.5 nights
- Corporate: 2 nights
- Offline: 3 nights
- Online: 3 nights

Repeated visits pie chart



Revenue Analysis

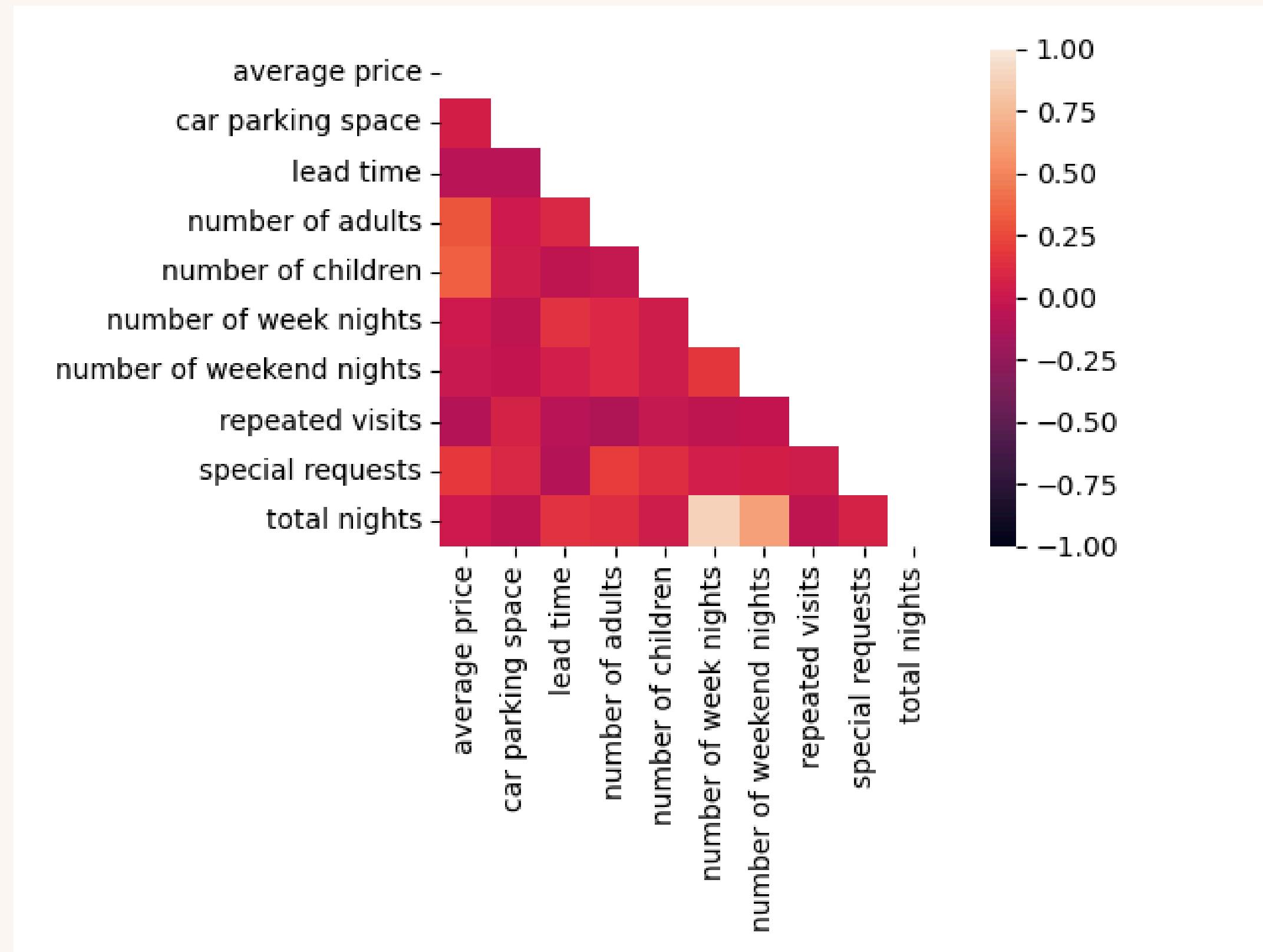


- The majority of revenue comes from online bookings then offline ones.
- Online bookings generate the most revenue per booking then aviation ones.

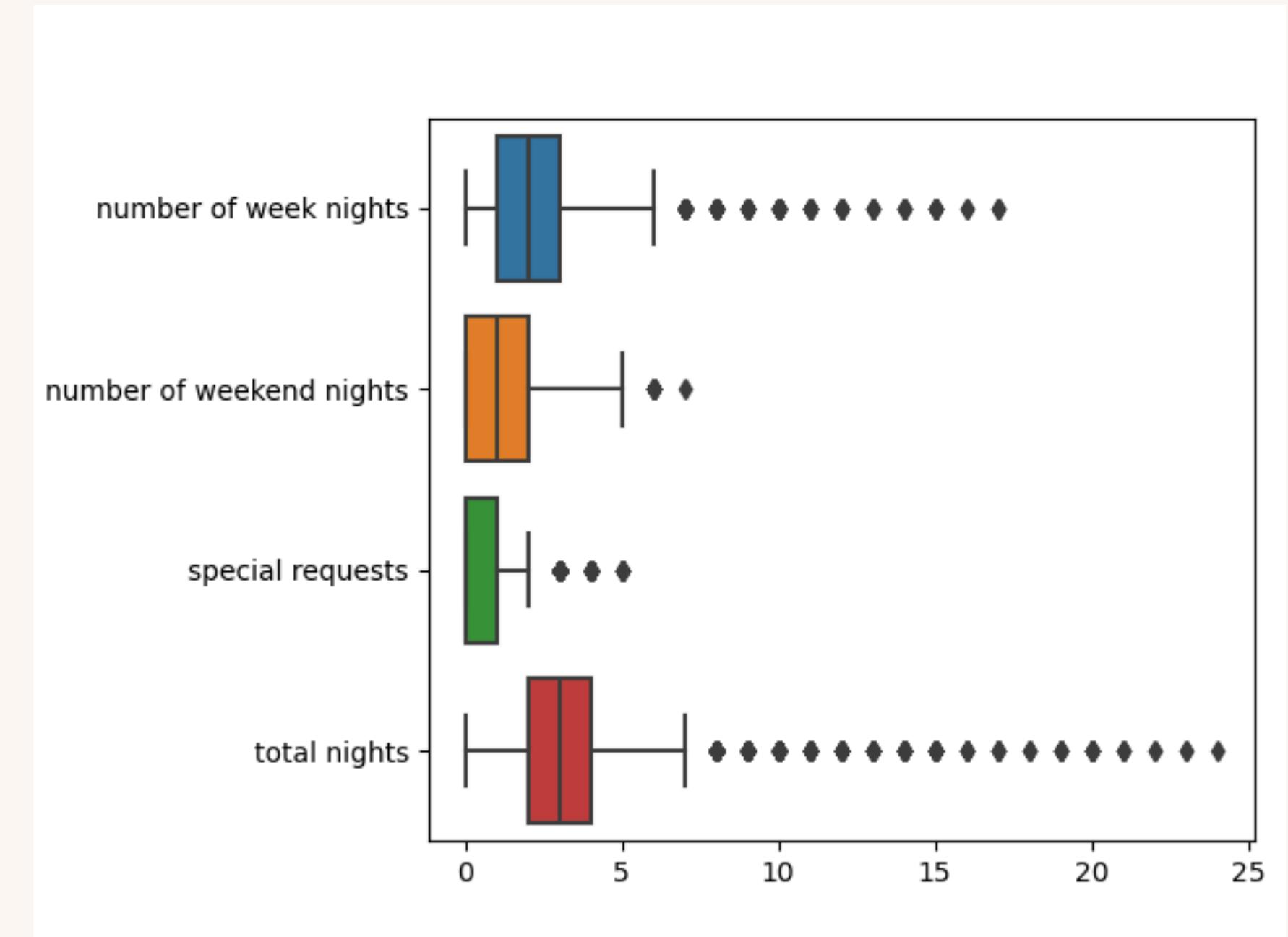
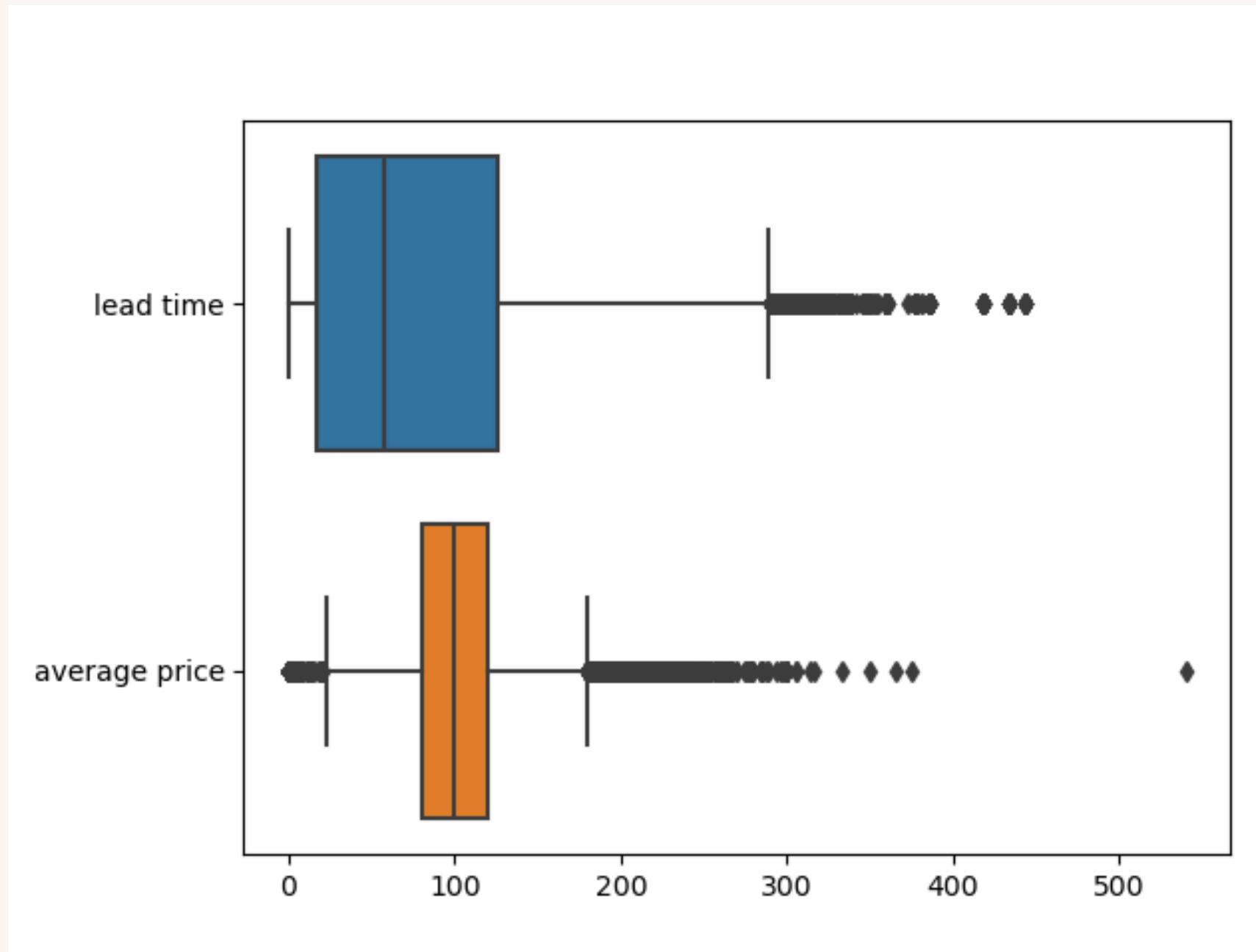
Appendix



Correlation Heatmap for Numerical Categories



Box Plots



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Thank
you very
much!