Cancelation Factors and Resources Efficiency in Hotels

Problems

1 One in four hotel guests are canceling their booking ahead of a stay - an increase being driven by the sales tactics of online travel agencies.

The trend is causing problems for hoteliers who are unable to accurately forecast occupancy within their revenue management departments and creates headaches when organizing distribution across various channels.

source : https://www.phocuswire.com/Hotel-distribution-market-share-distribution-analysis#:~:text=The%20average%20cancelation%20rate%20in,of%206.4%25%20over%20four%20years.

2 Resource management in the hotel is one of the strategies that should be focused on. Imagine if a restaurant's team has expired groceries. Imagine if many workers like waiters or waitresses have much their own idle time.

We, as a management level of the hotel, do not want these inefficient resources as we could lose our money and increase many costs, especially on humans and food.

project Goals

1. Find out what lead into high cancellation rate for hotels

2. Maximize resources within hotels

Understanding the Market

Hospitality Trends

Riding the Wave

A record 20.6 million guests stayed at hotels and other accommodations in Portugal in 2017, about twice the country's population

National Statistics Institute, Portugal

Bloomberg

Cancellation Trend

CANCELLATION RATE BY RESERVATION VALUE

Percentage of on-the-books revenue cancelled before arrival in Europe

	2014	2015	2016	2017	2018	Change
Booking Group	43.4%	43.8%	48.2%	50.9%	49.8%	6.4
Expedia Group	20.0%	25.0%	25.8%	24.7%	26.1%	6.1
Hotelbeds Group	33.2%	37.8%	40.3%	38.3%	37.6%	4.4
HRS Group	58.5%	51.7%	55.2%	59.4%	66.0%	7.5
Other OTAs	13.7%	15.2%	27.0%	24.4%	24.3%	10.6
Other Wholesalers	31.2%	30.3%	34.6%	33.8%	32.8%	1.6
Website Direct	15.4%	17.7%	18.0%	18.4%	18.2%	2.8
AVERAGE	**32.5%**	**34.8%**	**39.6%**	**41.3%**	**39.6%**	**7.1**

Yearly average percentage of on-the-books revenue cancelled prior to guest arrival from a sample of 680 D-EDGE clients in Europe.
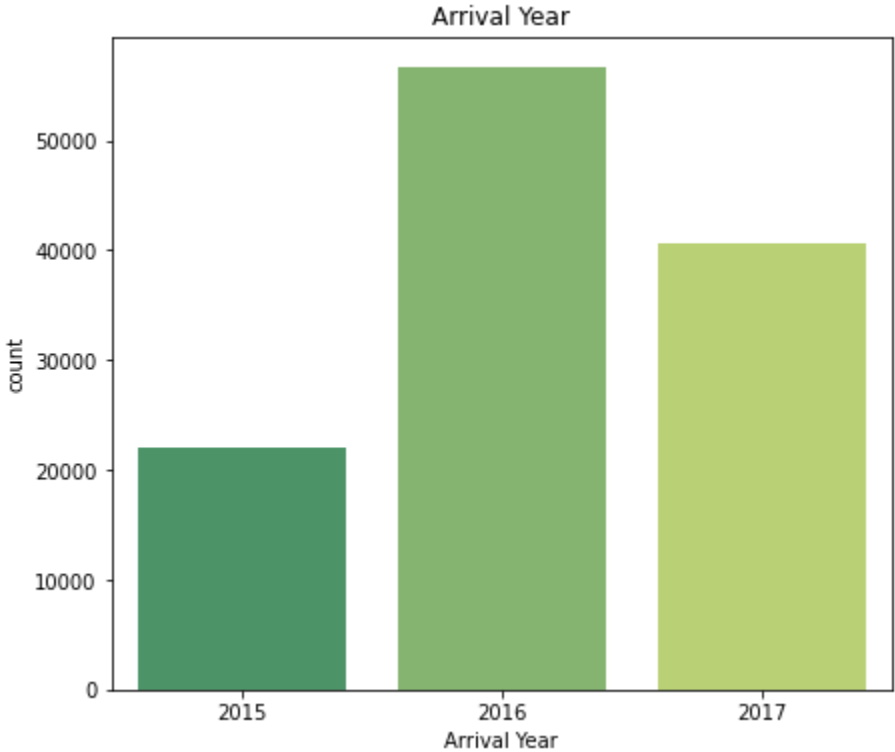
D-EDGE, Hospitality Solutions

www.d-edge.com

Analysis

Arrival Year by Year Analysis

arrival_date_year	2015	2016	2017
is_canceled			
0	0.12	0.30	0.21
1	0.07	0.17	0.13

# Number of Booking & Number of Cancellation

- Number Booking has a positive correlation with Number of Cancellation
- Highest number of booking and highest number of cancellation is recorded in the same month

Number of Booking for each month and year



Number of Canceled Booking
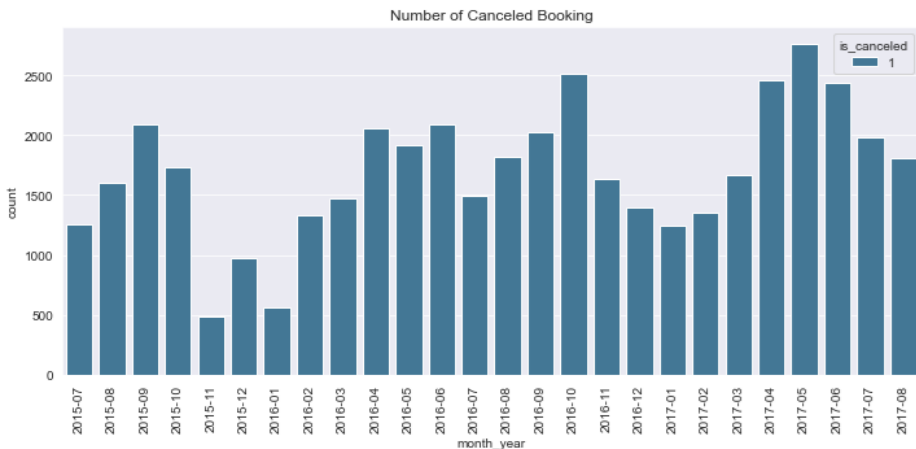
Market Segment & Cancellation

- Online travel agent has the highest confirmed booking and the highest number of canceled booking

- Group Market segment has higher number of cancellation compared to it's confirmed

Market Segment of canceled and non canceled booking
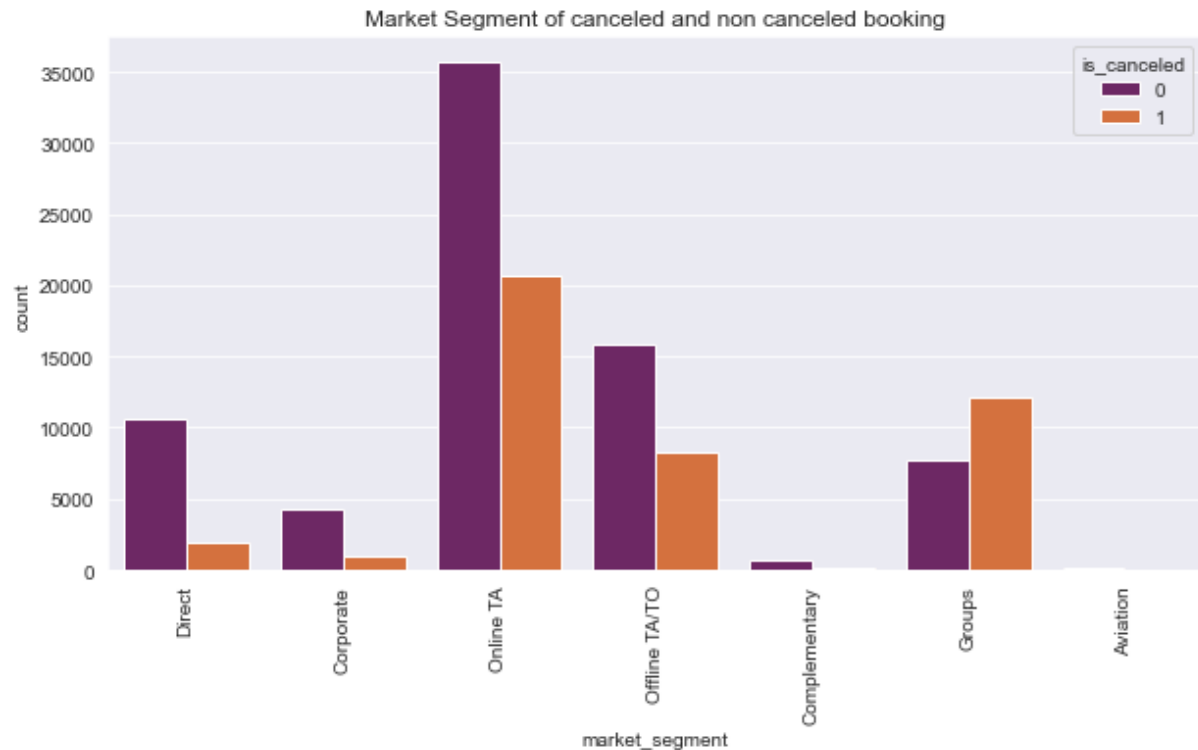
Deposit Type & Cancellation

- Most confirmed booking has a no deposit type policy

- Highest Cancellation also has a no deposit policy

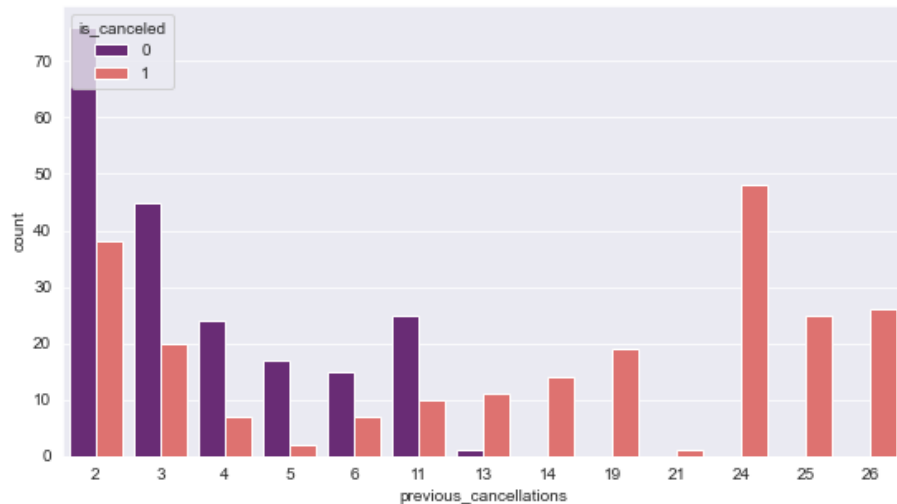- No deposit Policy might be reason why a there's a high rate of cancellation
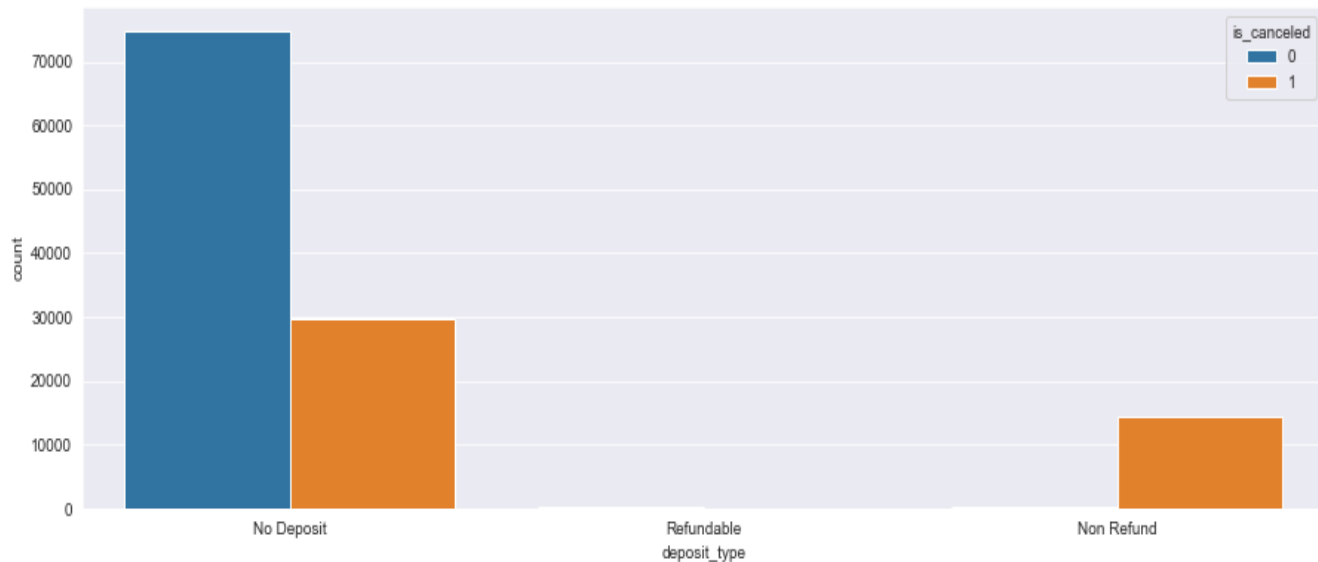
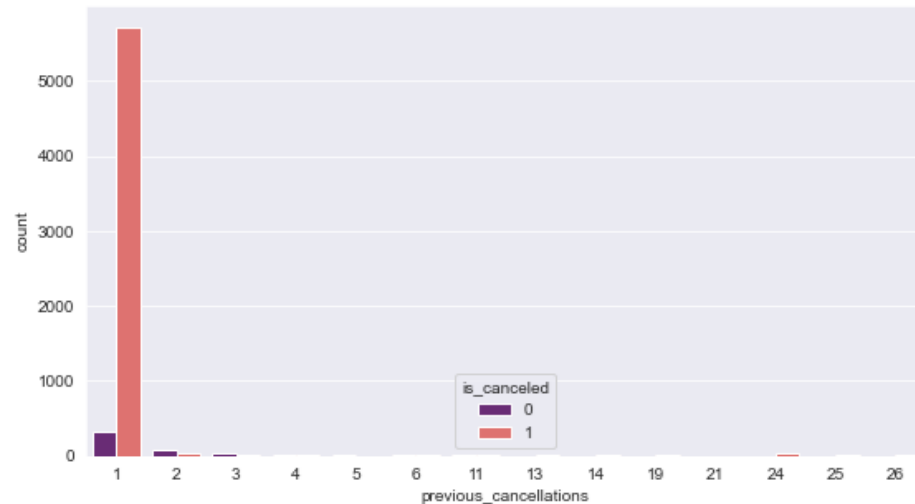# Previous Cancellation & Cancellation

- For Traveler who has cancelled before, traveler that cancelled 1 time seems to have the highest tendencies to cancel again

- For Traveler that has cancelled more than 11 times their cancellation rate is way higher compared to it's confirmed booking
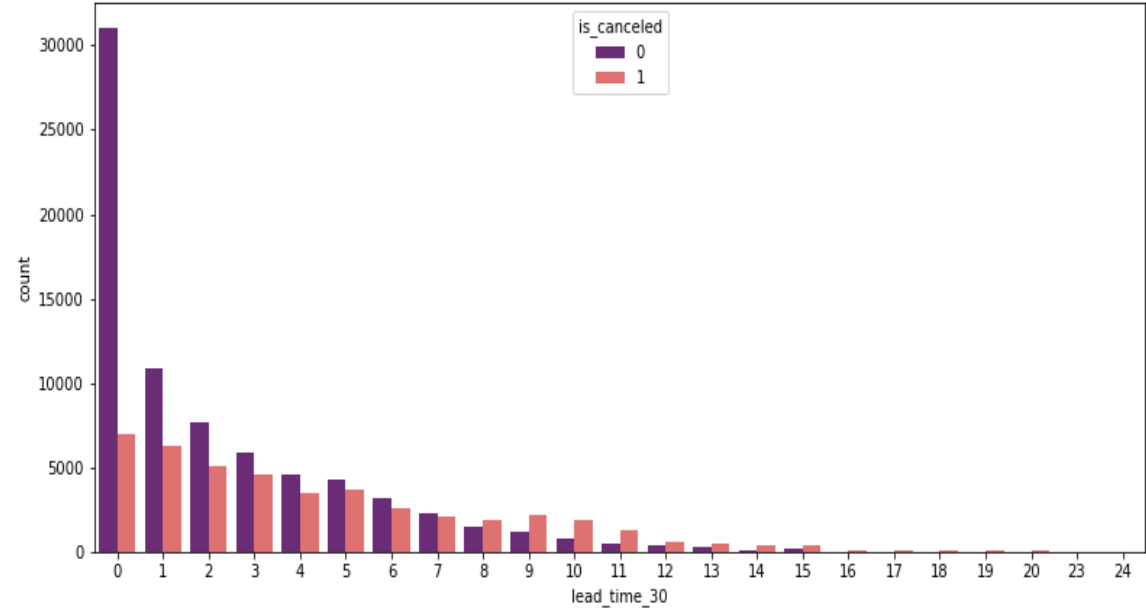
Lead Time & Cancellation

Customers who has more than 210 days lead time has a higher cancellation rate compared to it's confirmed booking
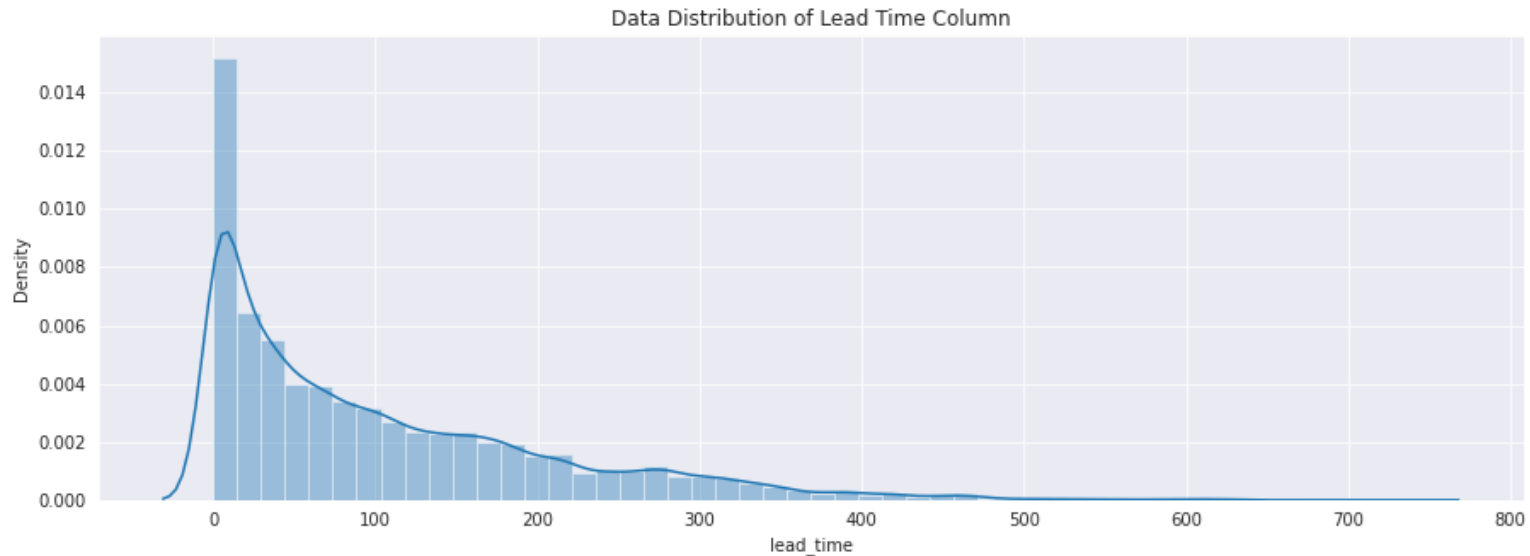
*lead time = arrival date - booking date
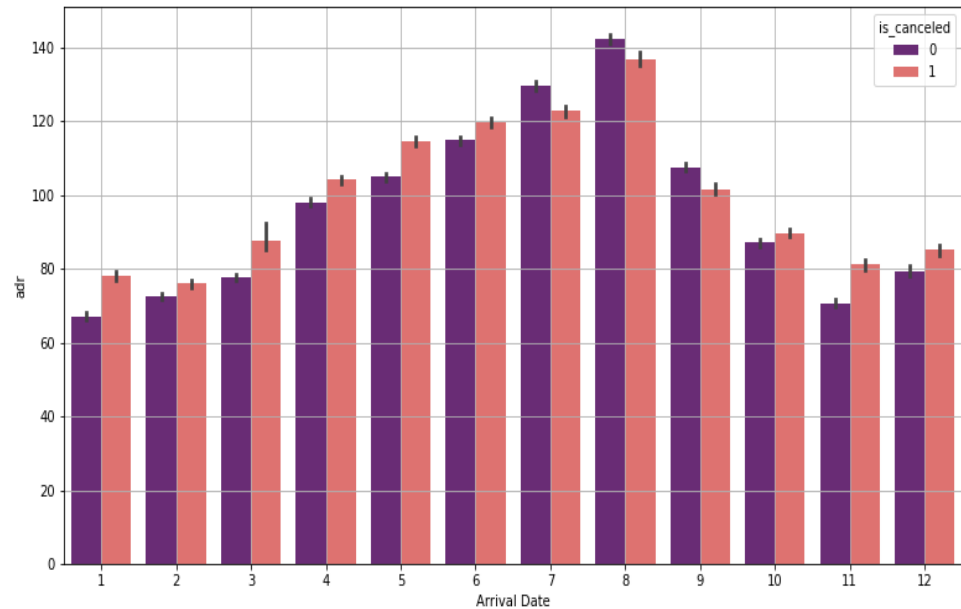
'Lead Time' Data Distribution

Data Distribution of Lead Time is shown as Right-skewed distribution.

Data Distribution of Lead Time Column
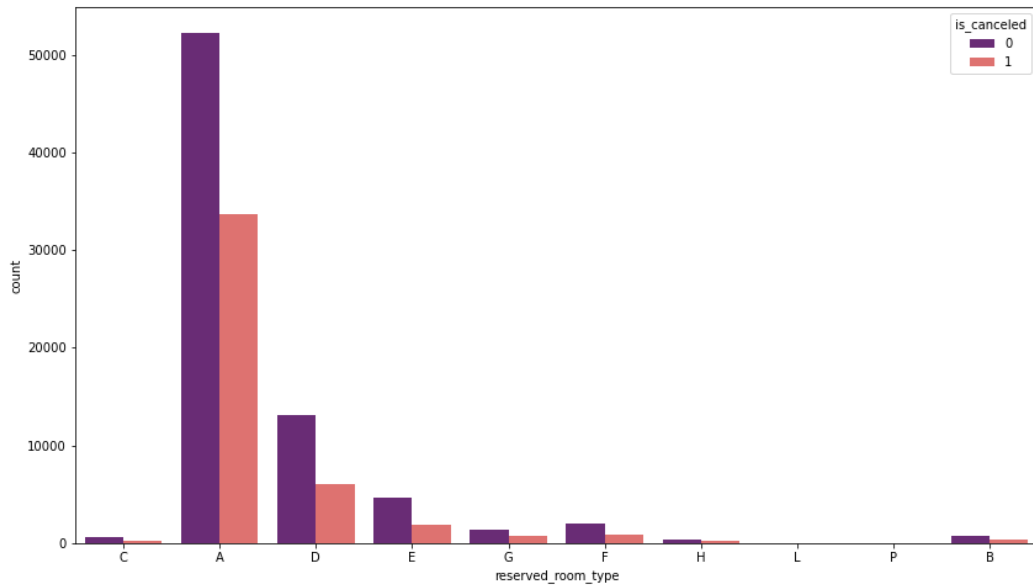
Average Daily Rate & Cancellation

Highly ADR for cancellation occured all of months except for July, August and September
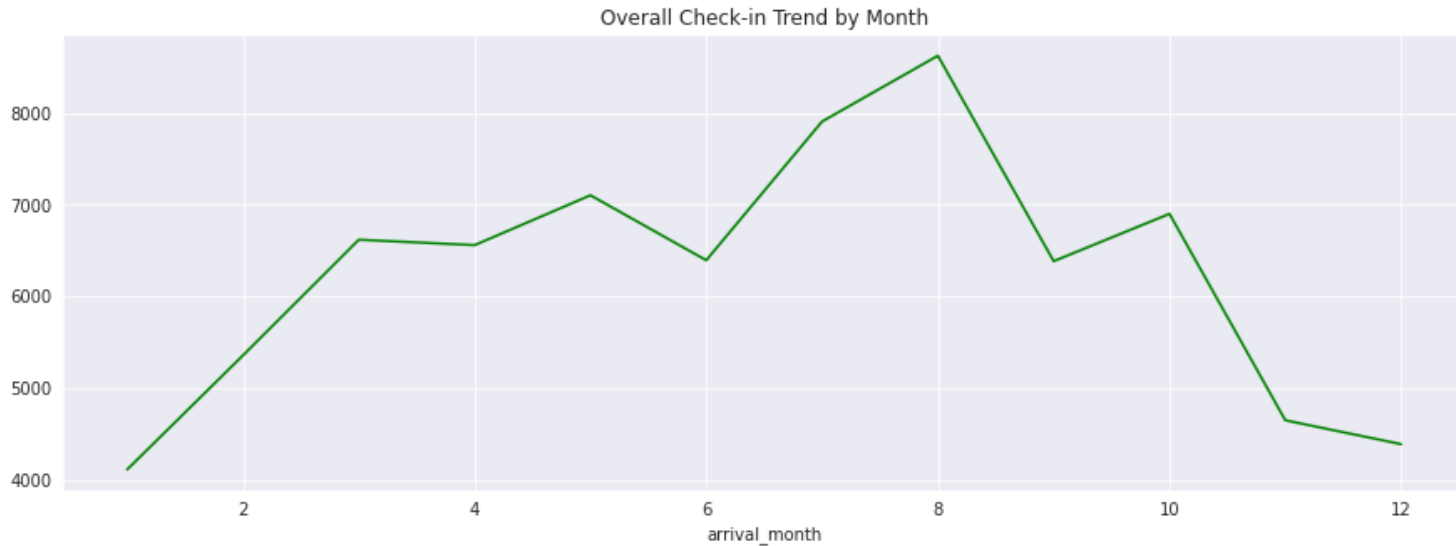
Reserve Room & Cancellation

Room type A has high number of reserved but also have high cancellation compare to others room type

Overall Check-in Trend by Month
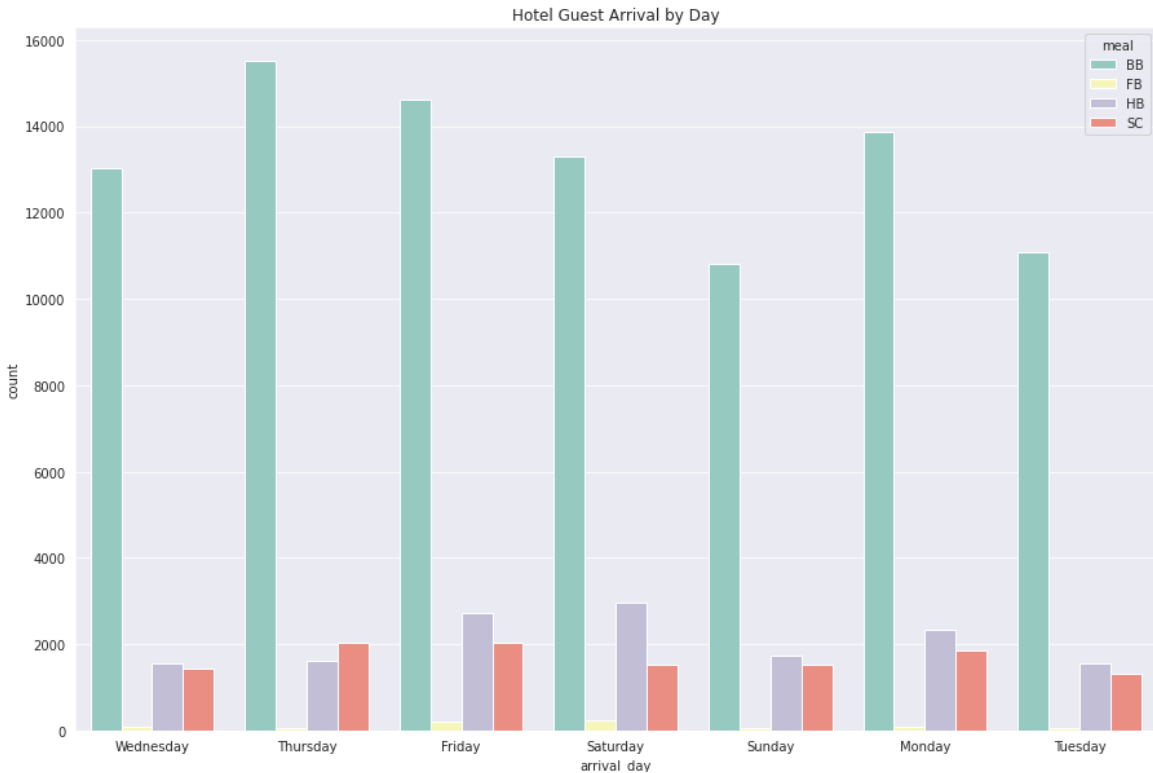
Most guests come and start to stay in August, July, May, and October.

Overall Check-in Trend by Month

Hotel Guest Arrival By Day

Most guests choose Bed-Breakfast (BB) while staying in the hotel.

Hotel Guest Arrival by Day

Daily Check-in by Month

Daily Check-in shows us about how crowded hotels on what month and on what day.

Daily Check-in by Month
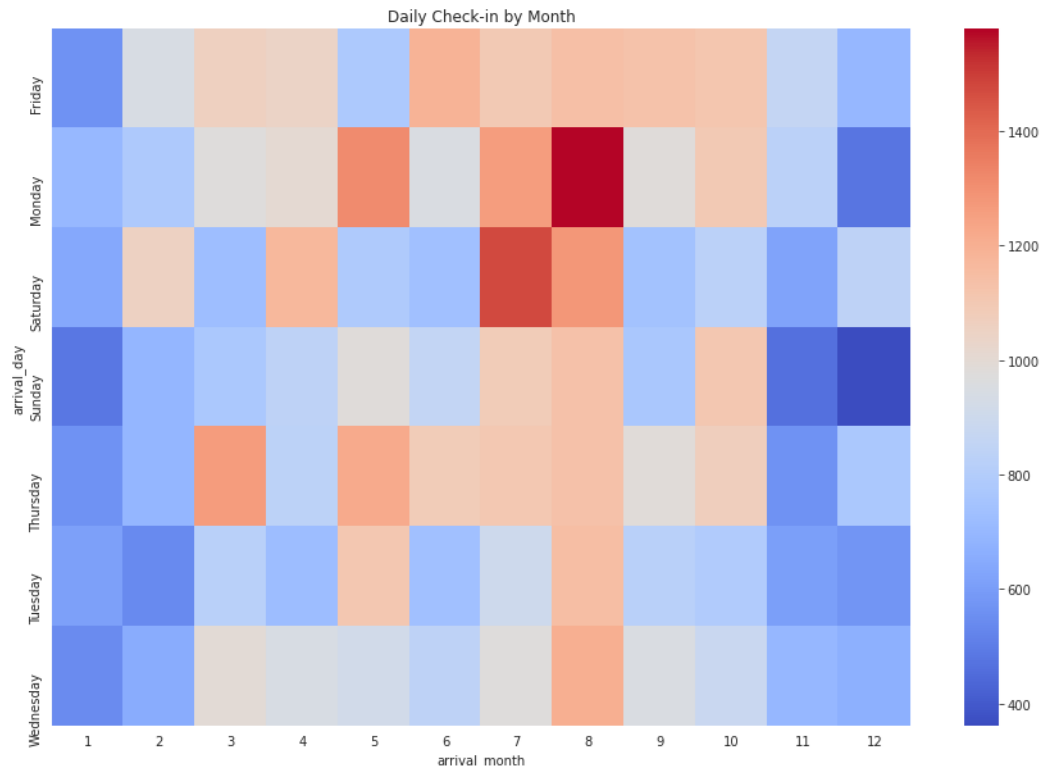
Daily Check-in by Month

Cluster map differs contrast about how crowded hotels on what day and on what month.

Daily Check-in by Month
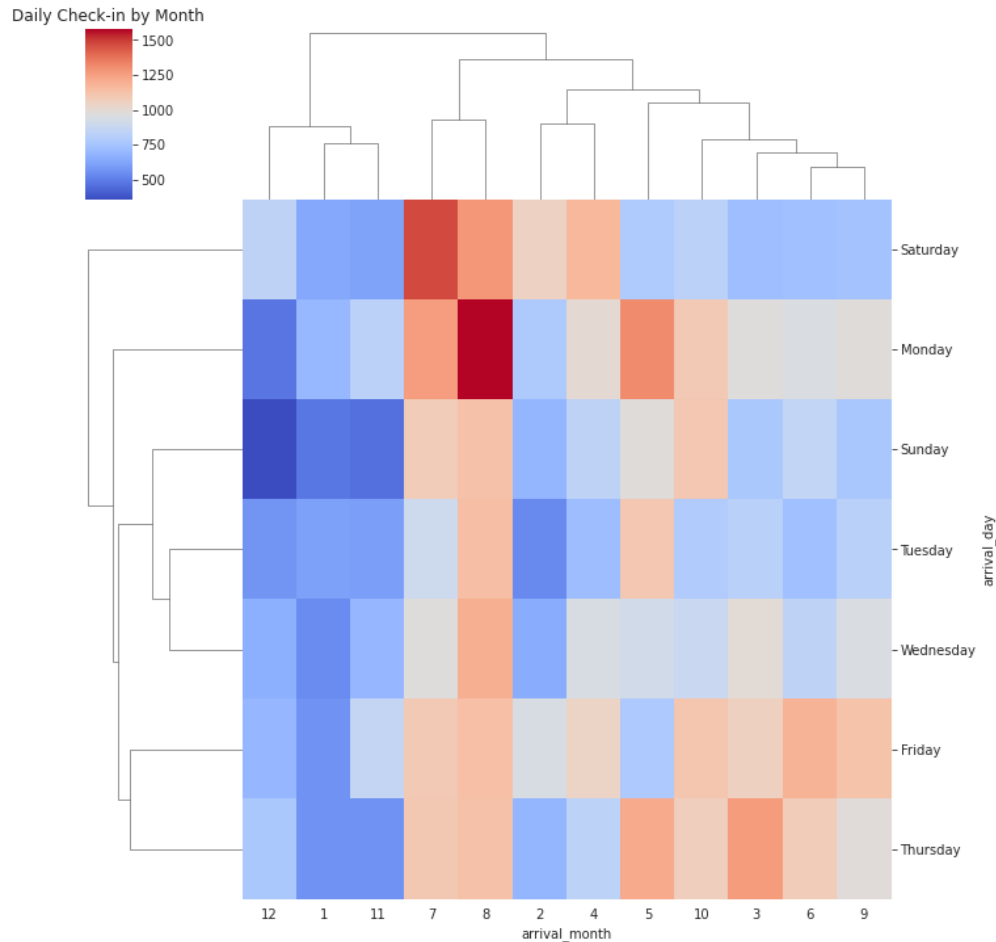
Summary

- Number Booking have a positive correlation with the number of cancellation.
- Group Booking is the only market segment that have a higher cancellation arrival compared to it's confirmed arrival.
- Customer who has 7 month or more lead time have a higher tendencies to cancel their booking.
- Traveler that has cancelled 1 time before has the highest tendencies to cancel again.
- Guests tend to book their rooms with breakfast instead of lunch or dinner.
- Most guests come and start to stay in May, July, August, and October.
- In Portugal, the busiest month in the hotels are July and August, especially on Saturday and Monday when guests start to check-in.

Recommendations

More Rigid /Stricter Cancellation T&C For Customer Who has Cancelled Before

This is one way to reducing the tendencies of customers who have cancelled before to cancelled again

Non Refundable Only for Group Booking

Group Booking has a higher cancellation rate compared to the confirmed rate, with this policy hotel would not suffer any loss revenue caused by cancelled group booking

Non Refundable Booking Only For Booking with More than 210 lead days

Since Customer who has more than 210 lead days has a higher chance of cancellation, having this policy will protect the hotel from losing revenue

Breakfast Awareness

Guests tend to have their bedrooms with breakfast package, so it might be good if management place more workers in the morning instead of noon or night. Even workers at the noon can be reduced and moved into the night shift.

Resources Efficiency

Resources are precious, especially when it comes to food and humans. July and August are the best time to stock more food especially on Saturday and Monday where guests start to check-in the room. The restaurant team could increase the number of workers too, to handle guests when meal time has come.

This is good for cost efficiency so the resources either humans or food might not be wasted.

Thank you