

GROUP 3

Recipe of a cancelled booking?

ANALYSIS OF HOTEL BOOKINGS DATASET

IST 687 : Introduction To Data Science

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WHY IS THIS IMPORTANT?

Cancellations means you no more get paid. It steals you from the opportunity to serve your guest.

Which also means total revenue is affected.

SCOPE OF THIS PROJECT


Find the trends in cancelations and develop insights which can lead to actions that reduce cancelation.

What's in the dataset

The dataset contains information of 40060 bookings

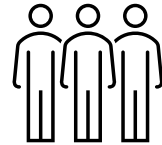
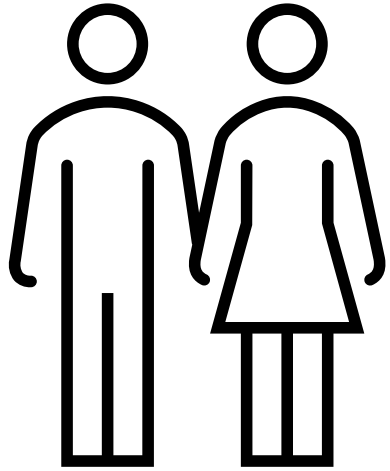
There are 20 attributes

After removing illegal bookings there were 39666 bookings



27.7%

CANCELED



70%

2 MEMBERS

17%

SOLO

13%


3+ MEMBERS

Who is our main guest?

The hotel caters hugely to 2 adults assumed as couples and followed by individuals.

Individuals were found to be a part of corporate bookings

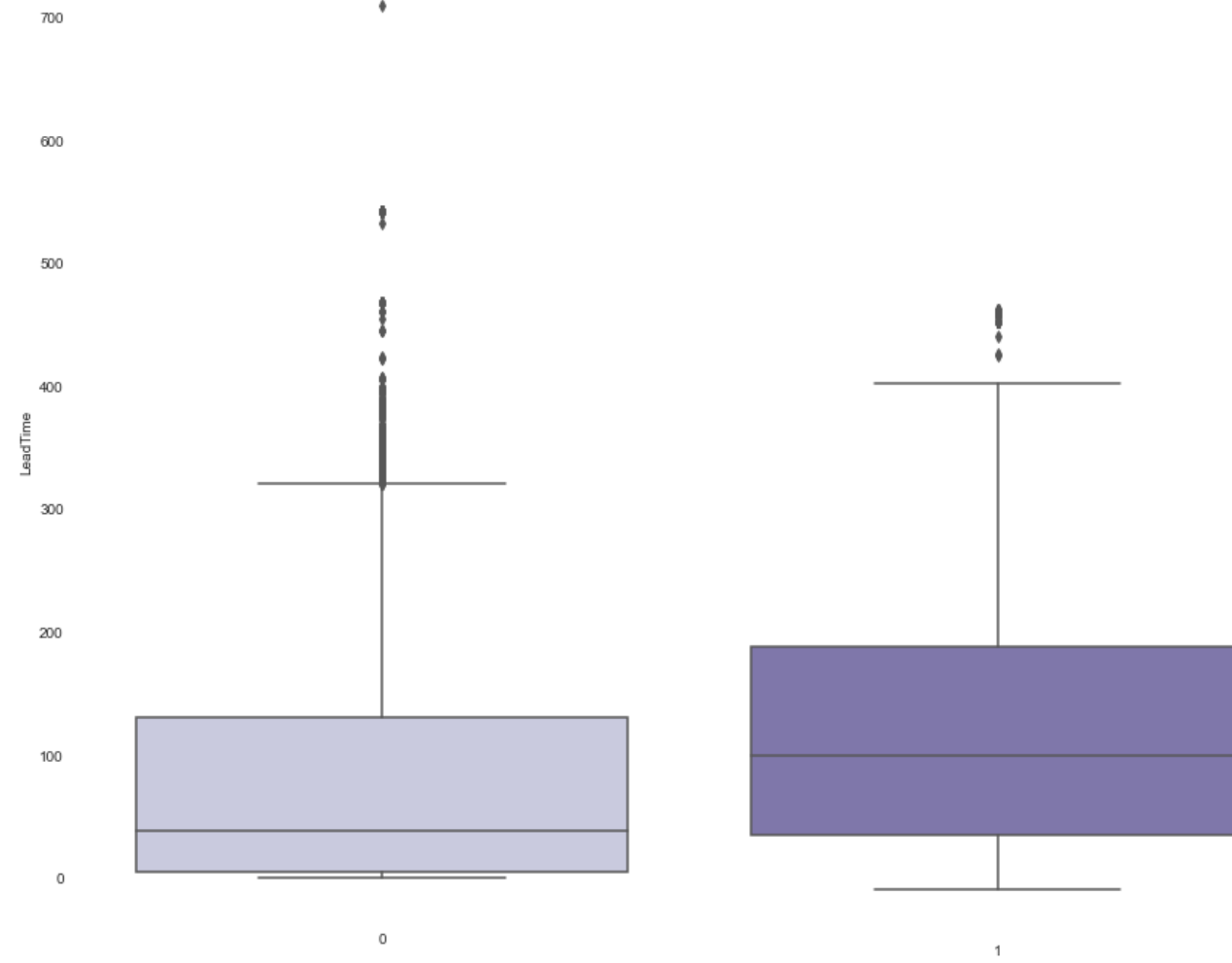
Why and when would you cancel?

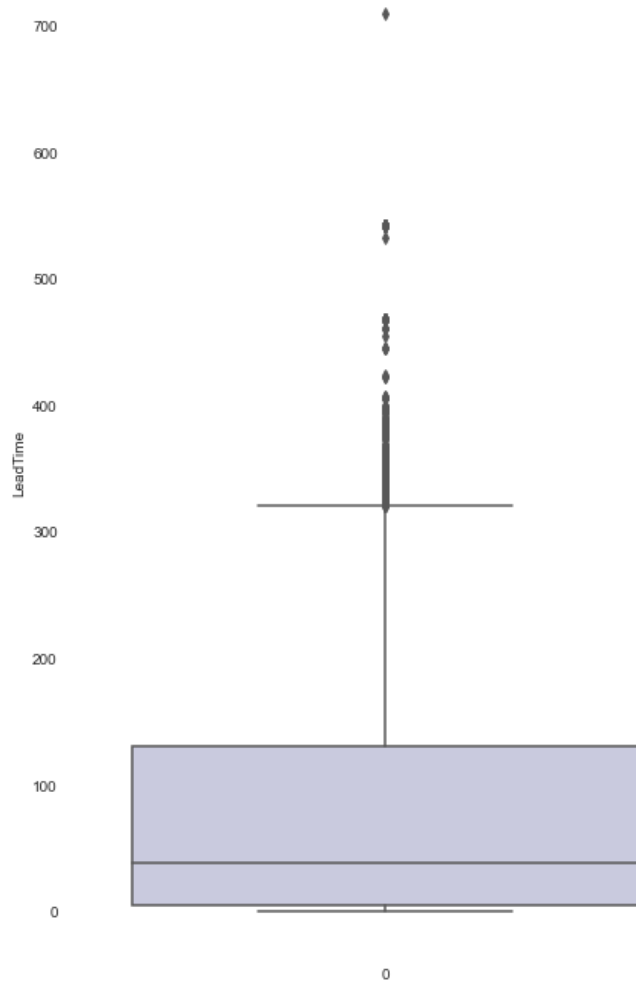


1

“Oh the baby is here early!”

Business Questions

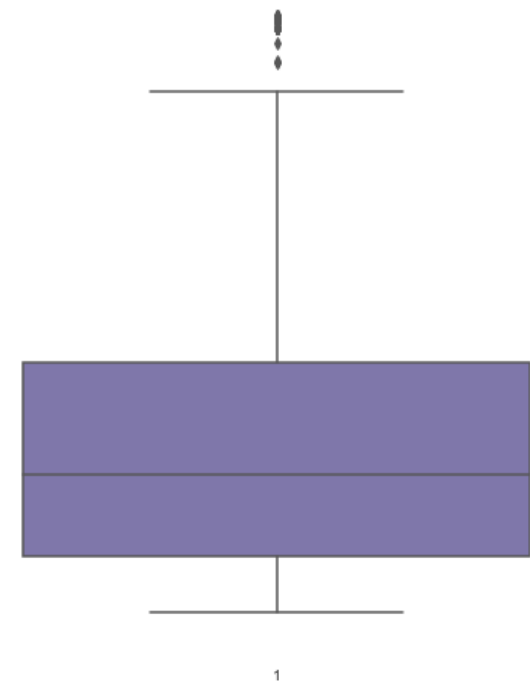




Influence of time between booking and check in

The majority bookings canceled were made more than 4 months before.

Reservations made a month before have lower cancelation chance

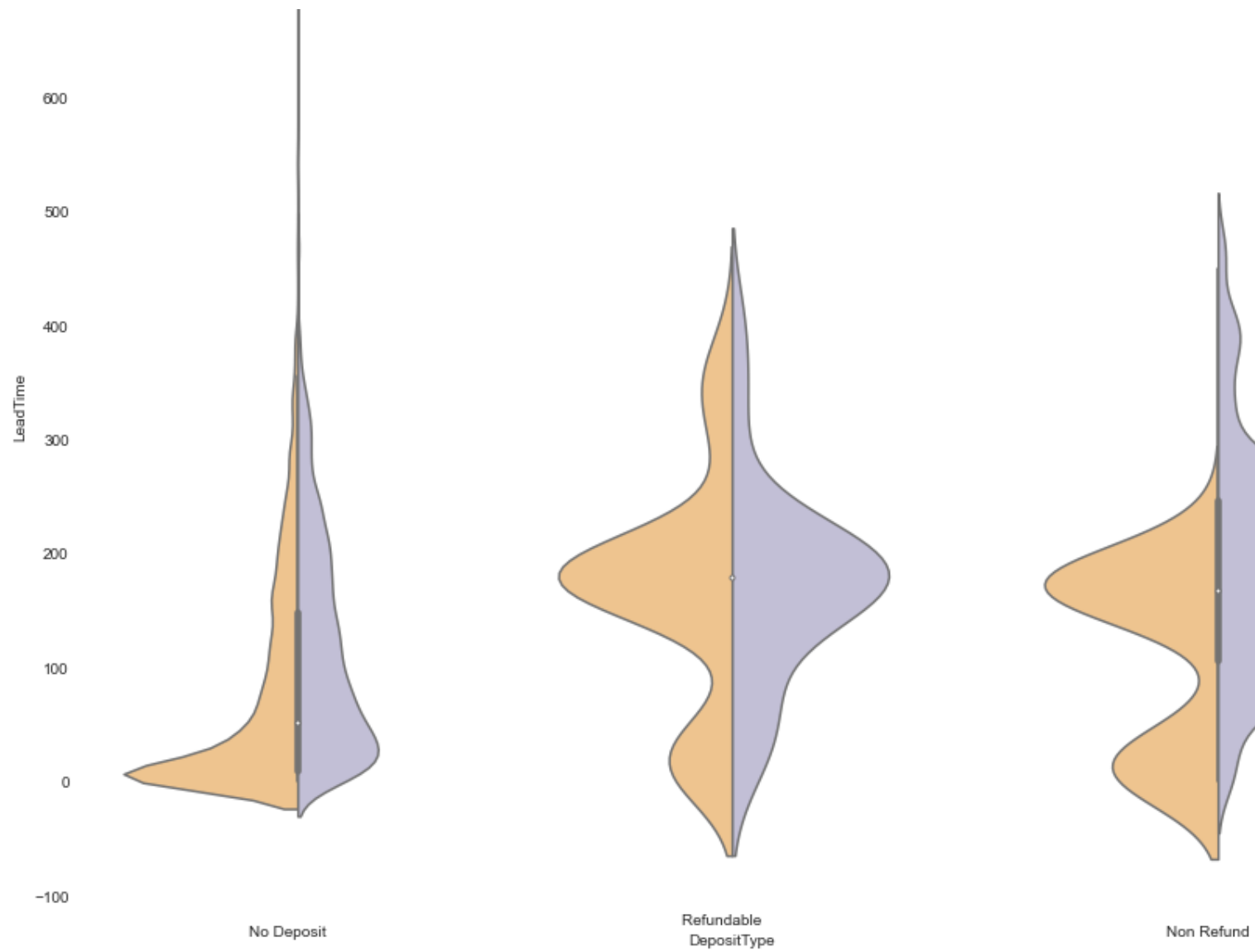


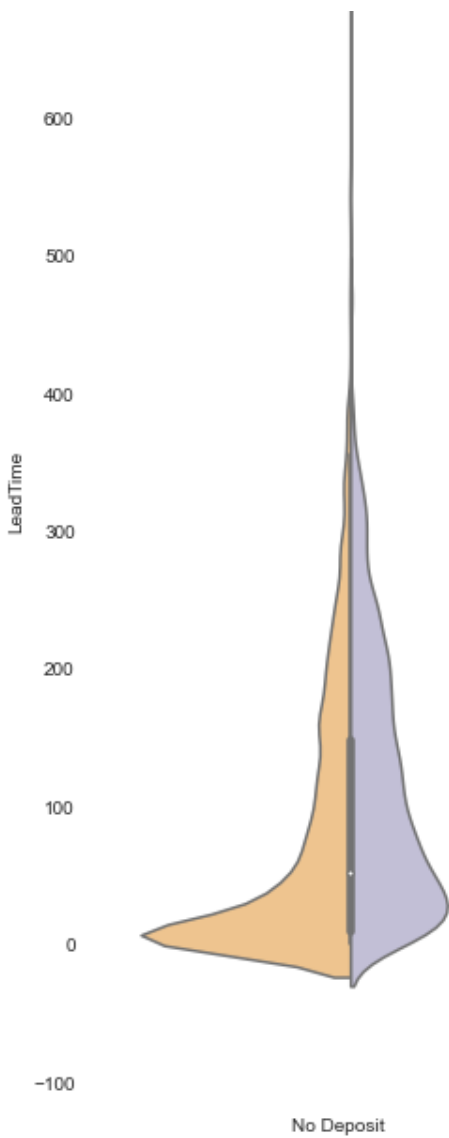


2

“I don’t get any money back if I cancel, this is a robbery”

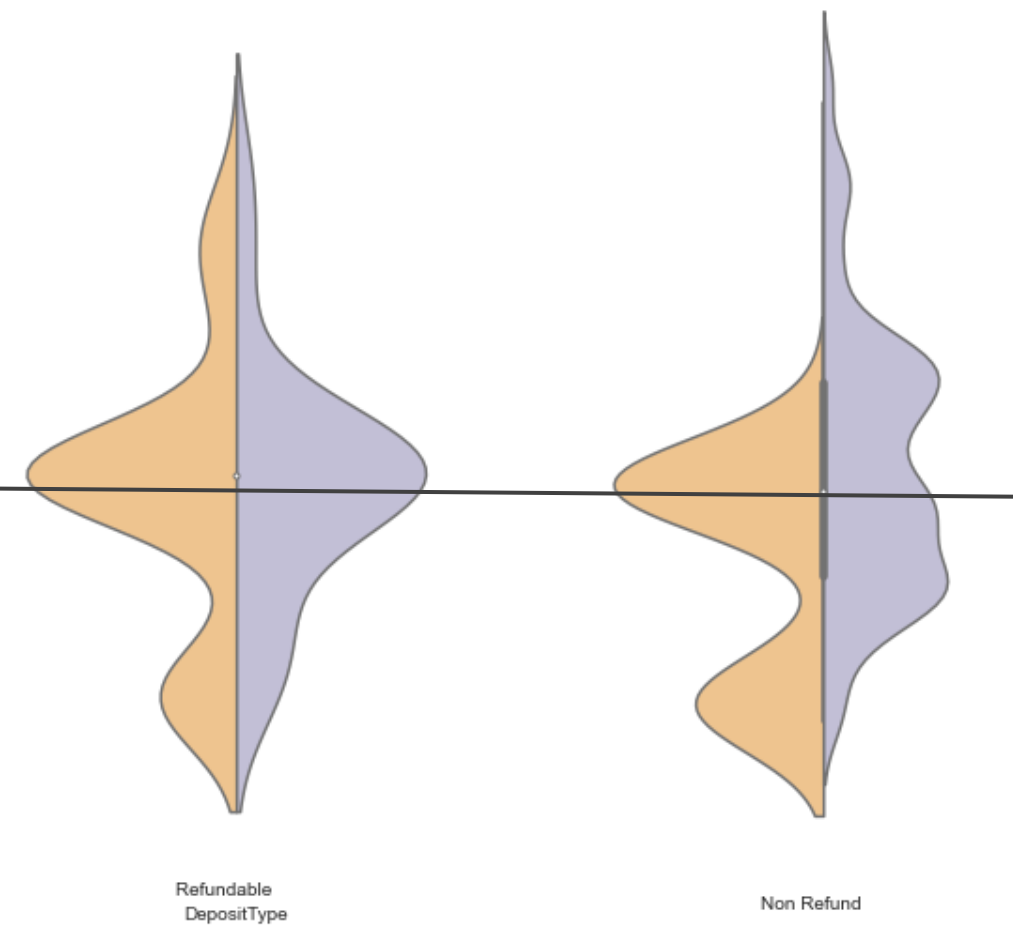
Business Questions

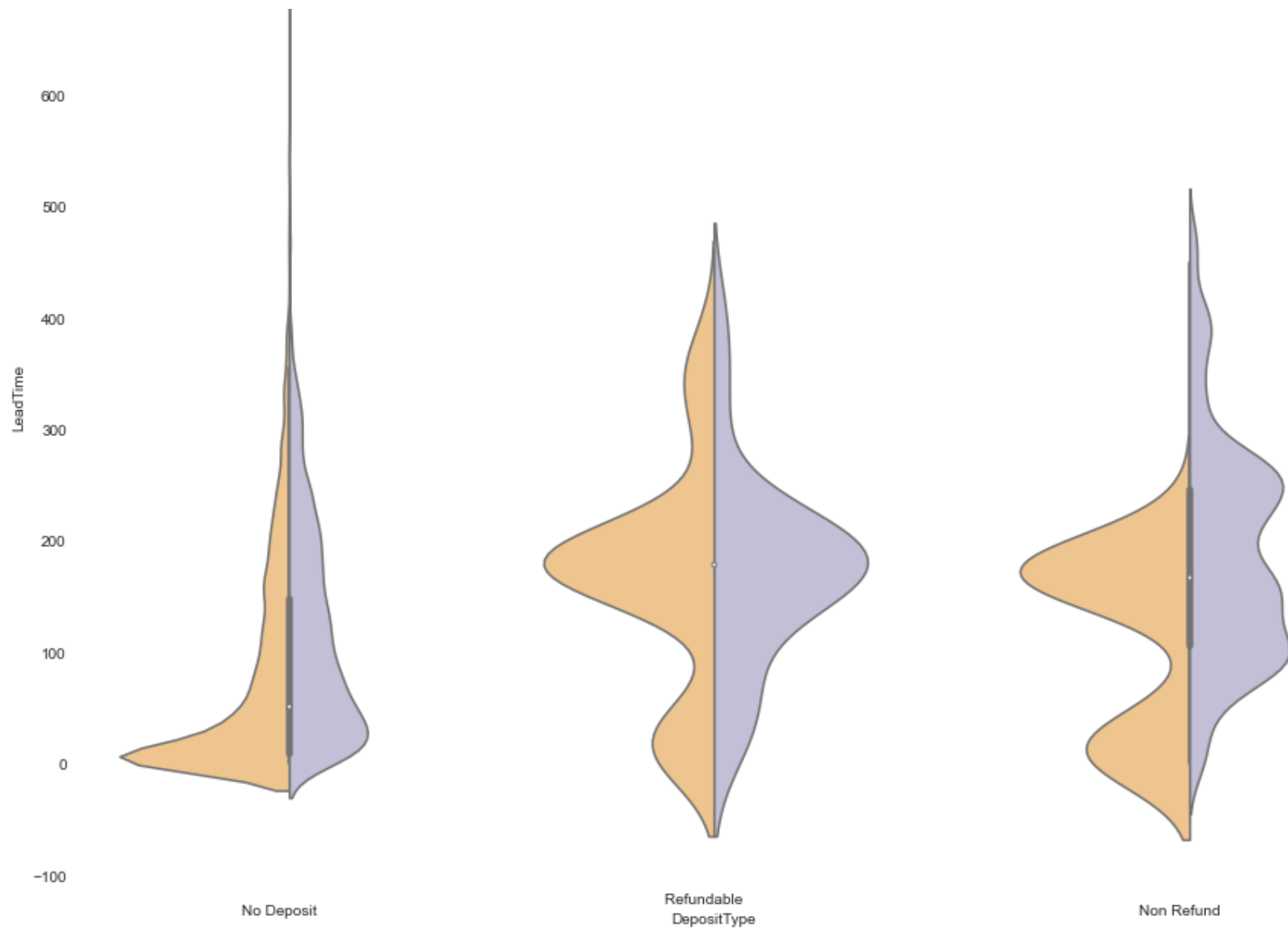




Deposit Criteria

We can see a deposit is required when a booking made at around 5+ months





People paying full deposit are canceling.

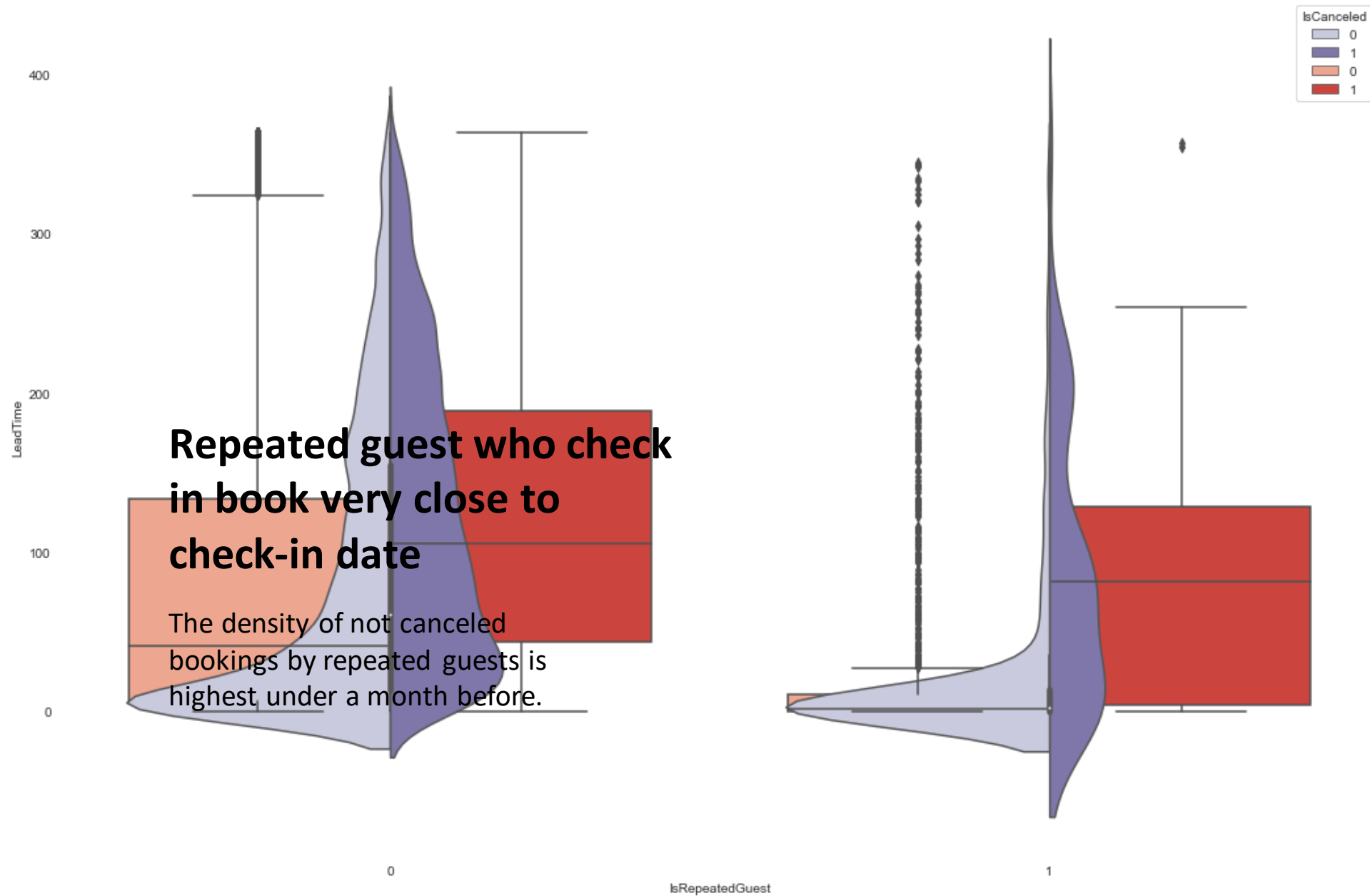
The cancelation for non-refund is spread out across all bookings.

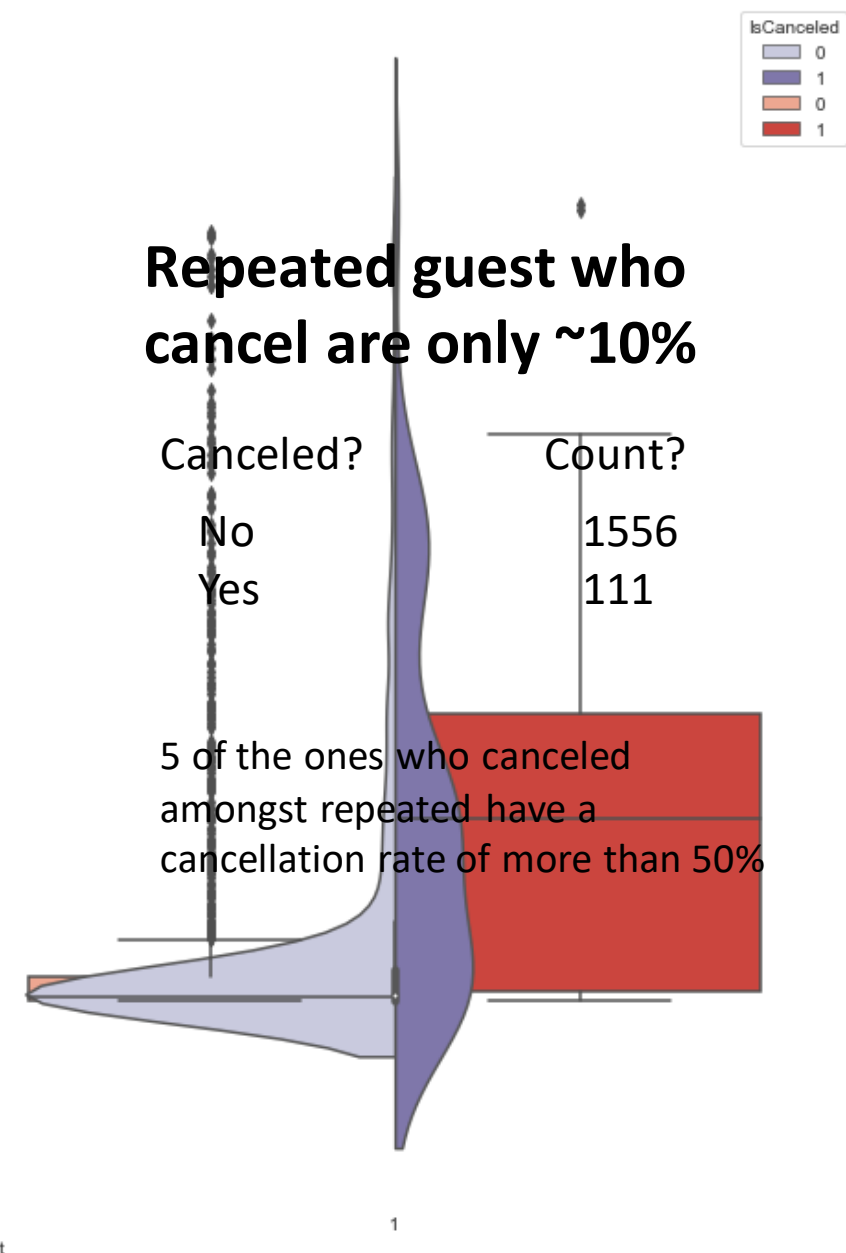


3

“Keep that place we went to last as a backup option”

Business Questions





Repeated guest who cancel are only ~10%

Canceled?

Count?

No

1556

Yes

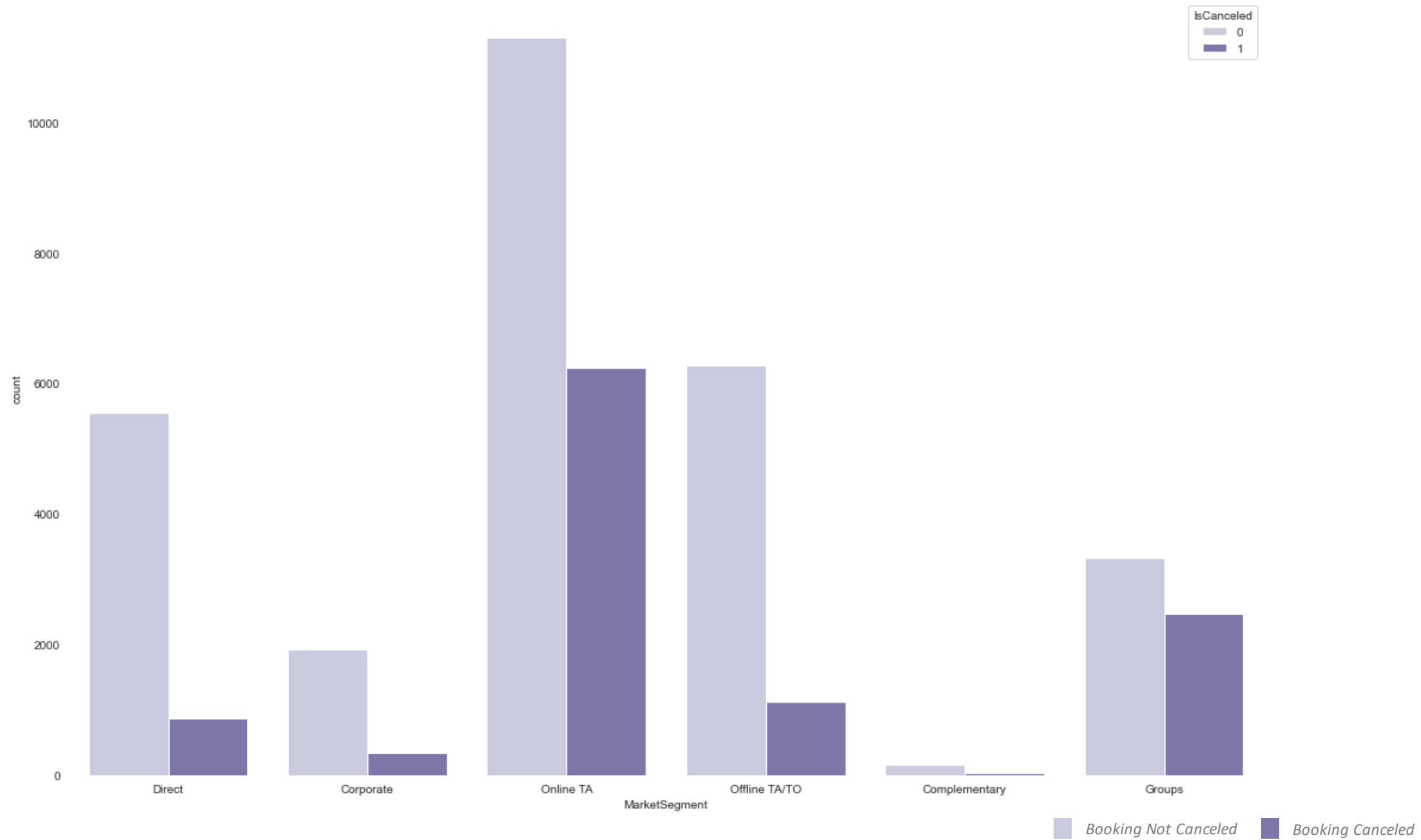
111

5 of the ones who canceled amongst repeated have a cancellation rate of more than 50%

4

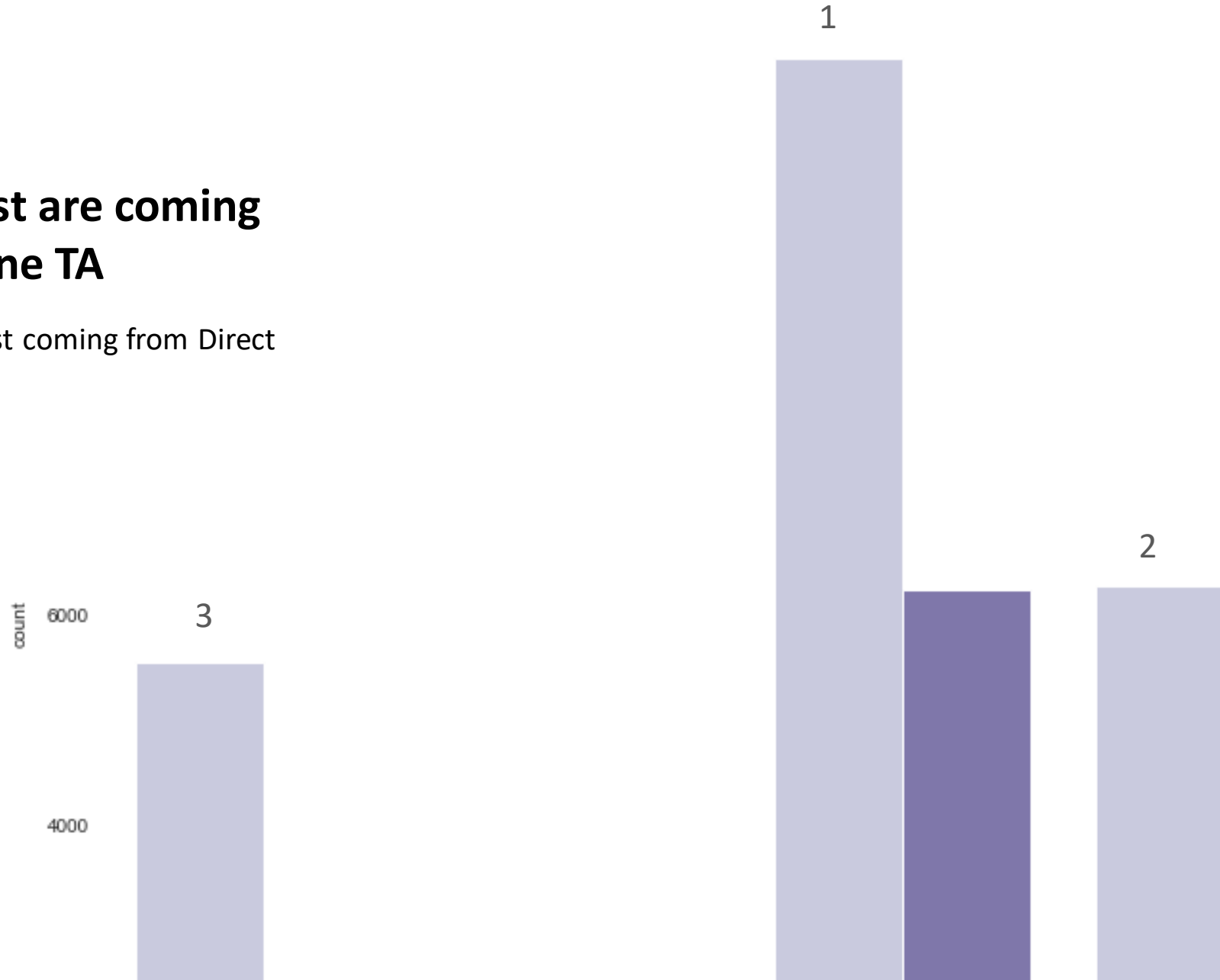
“Got a free upgrade to presidential suite at this other place ”

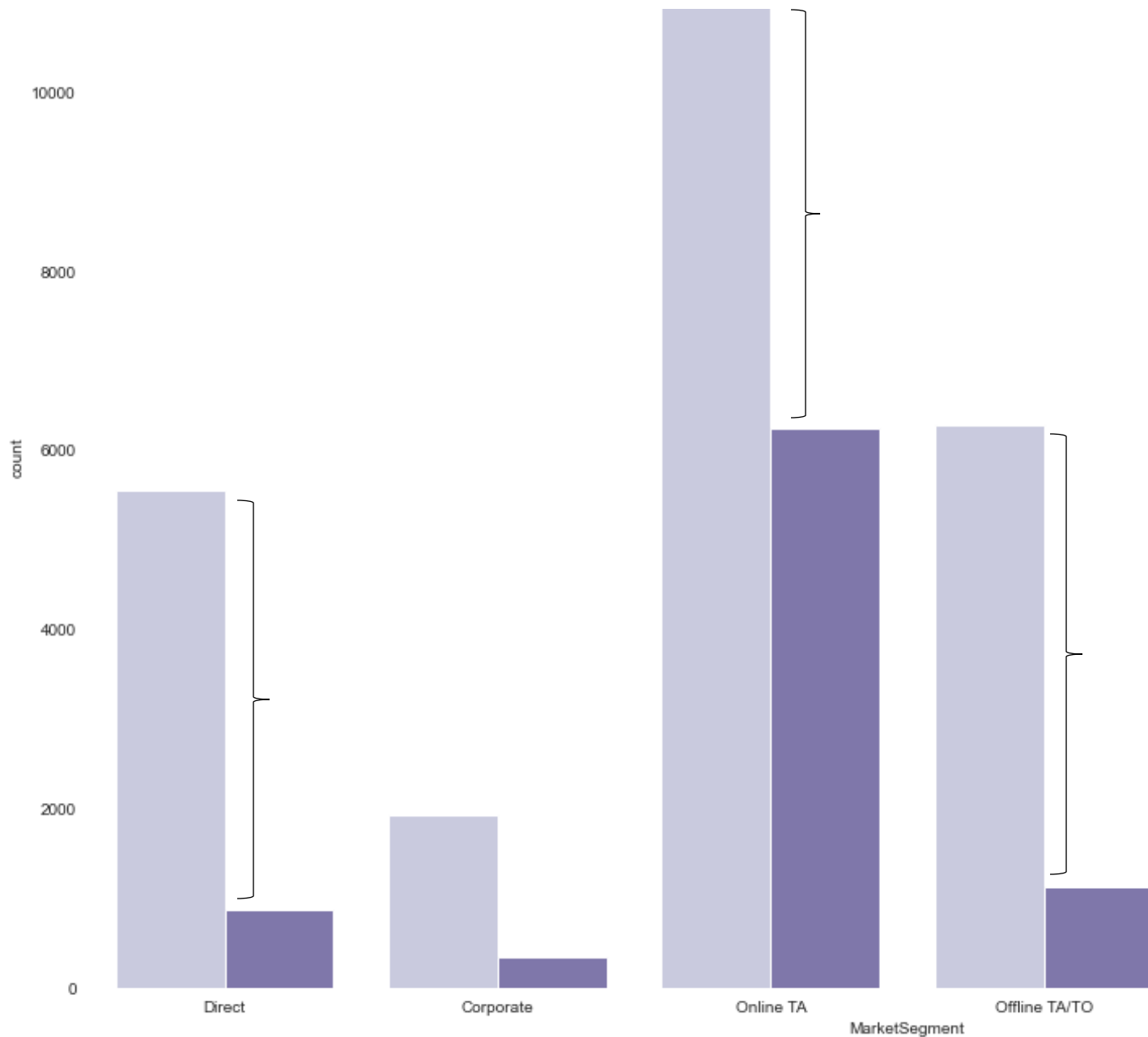
Business Questions



Most guest are coming from Online TA

The second best coming from Direct and Offline TA





Maximum cancelations come from online bookings

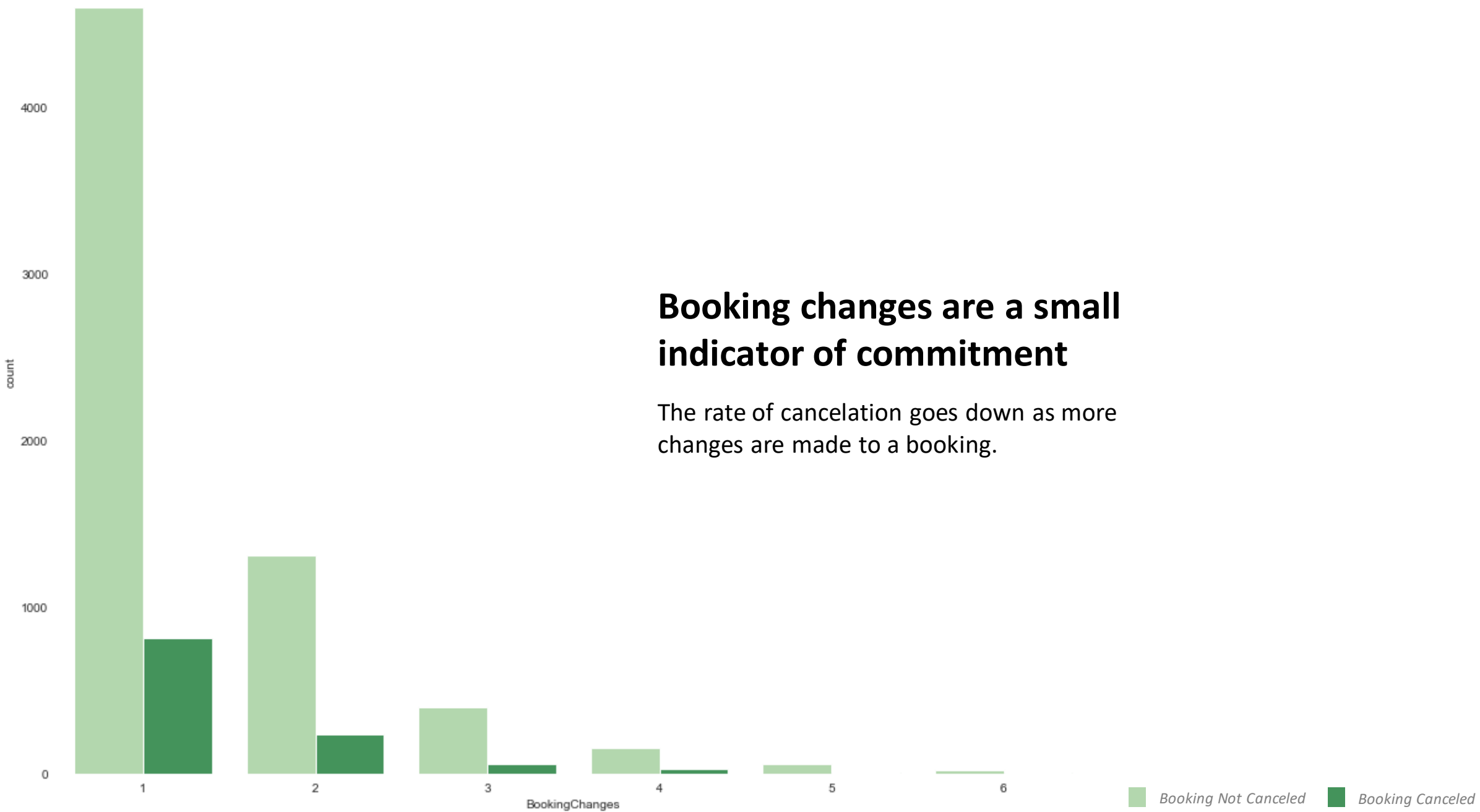
The value of high booking from Online is lost when we consider the rate of cancelation.

A large, ornate building, possibly a hotel or government building, is shown at dusk. The building has multiple stories with arched windows and is illuminated from within, casting a warm glow. A large, white, stylized number '5' is overlaid on the building. The sky is a mix of blue and orange, suggesting sunset or sunrise. Other buildings are visible in the background.

5

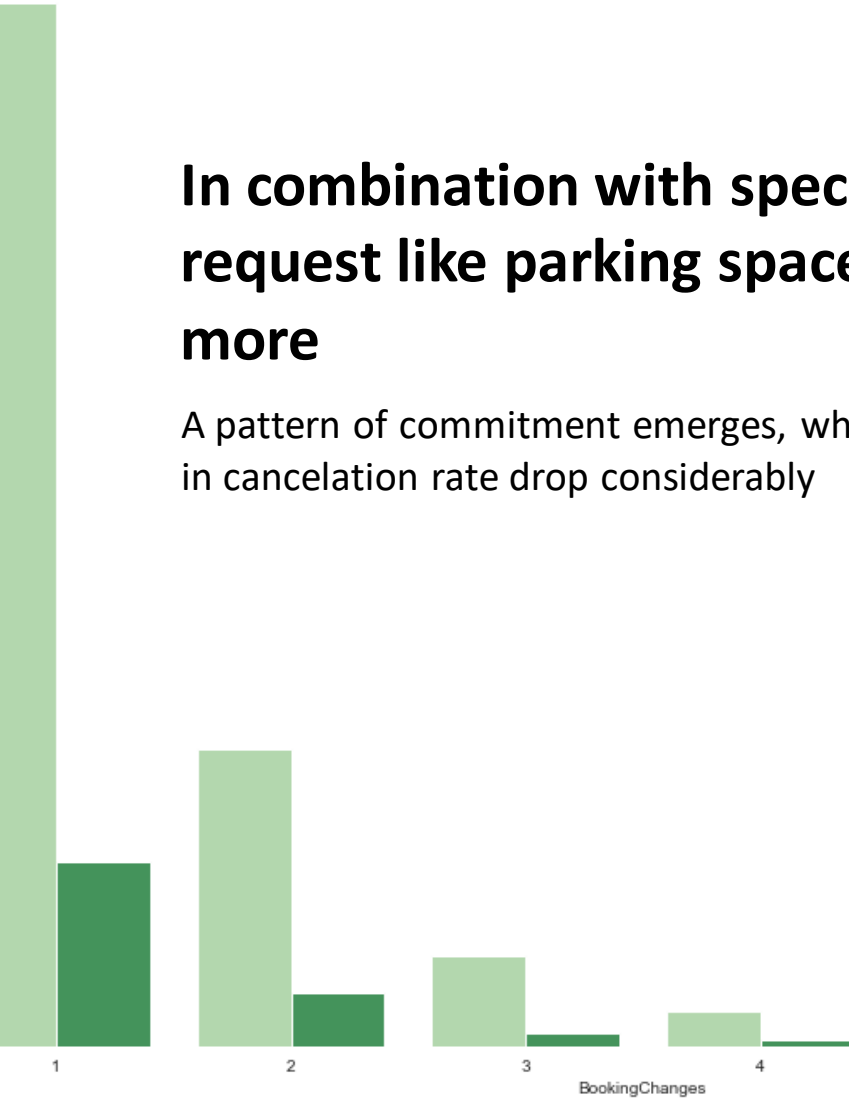
“Could you get a sea facing room and modified American meal plan instead?”

Business Questions



In combination with special request like parking space and more

A pattern of commitment emerges, wherein cancelation rate drop considerably



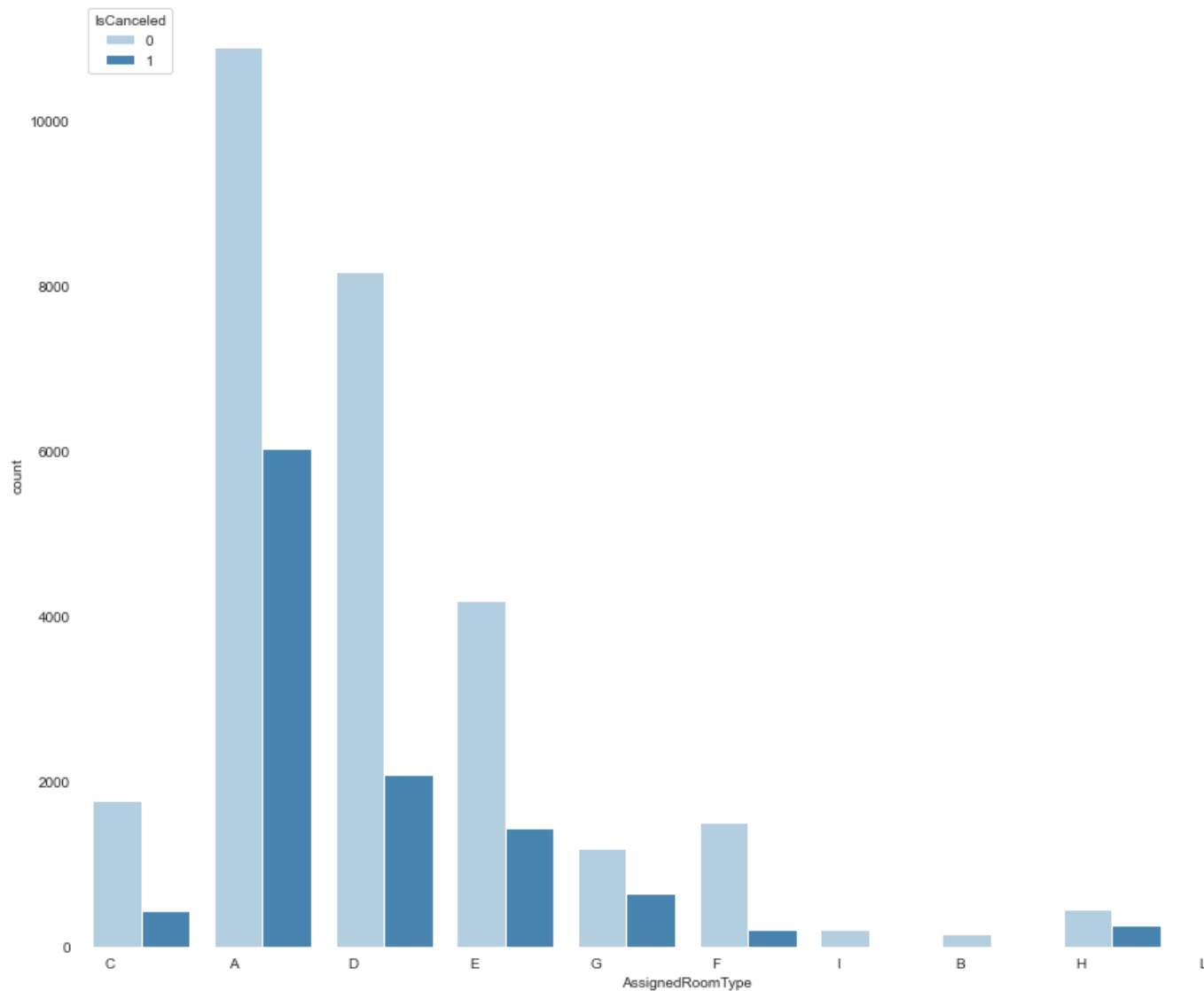
What can be done to reduce cancelation?

**Allow reservations
only 4 months into
the future.**

To reduce cancelation due to uncertainty
don't allow reserving rooms well in advance.

—

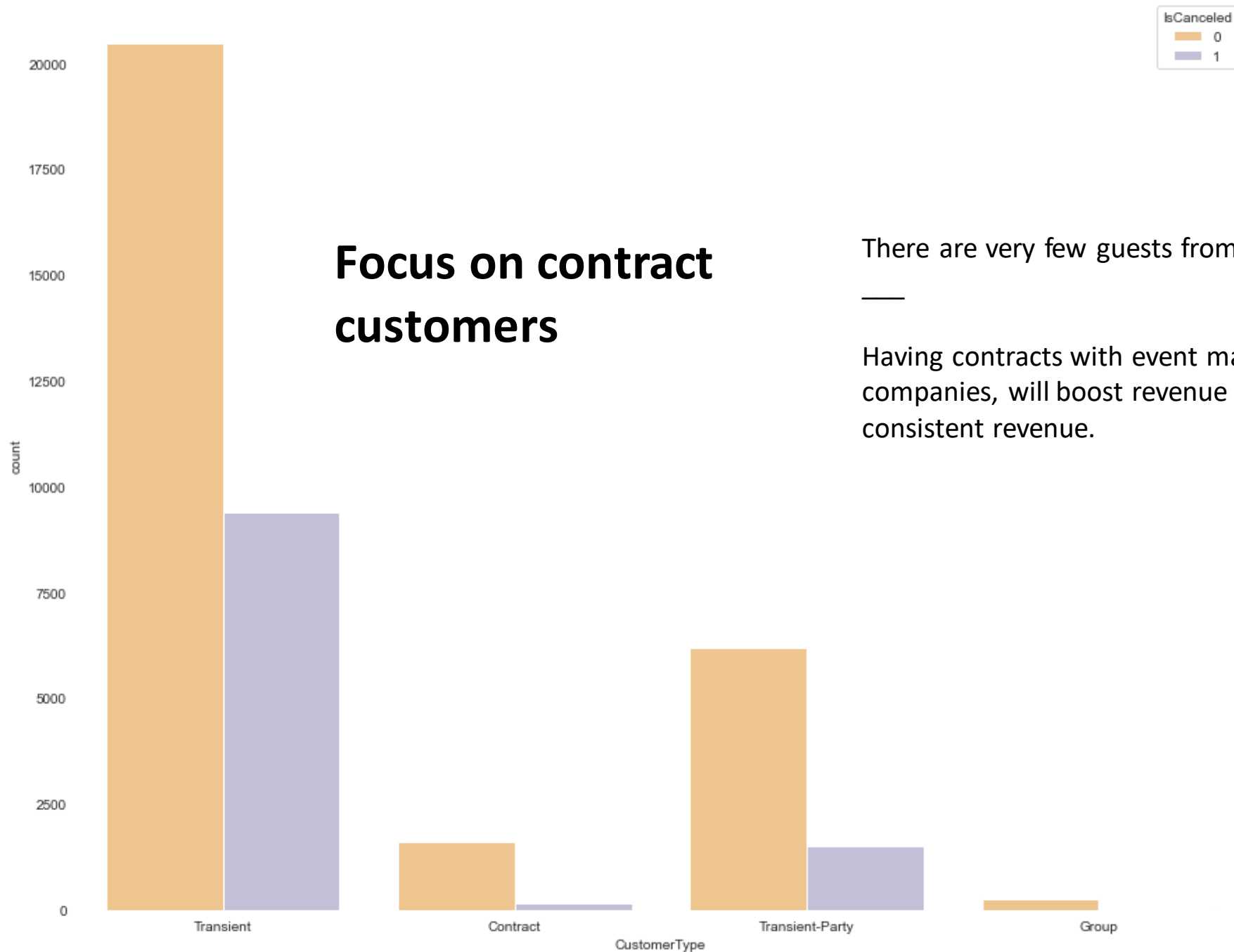
Unless it's a **Group booking**, as they tend to
follow through



Increase capacity of room type A

Room type A is the most requested followed by D, C respectively

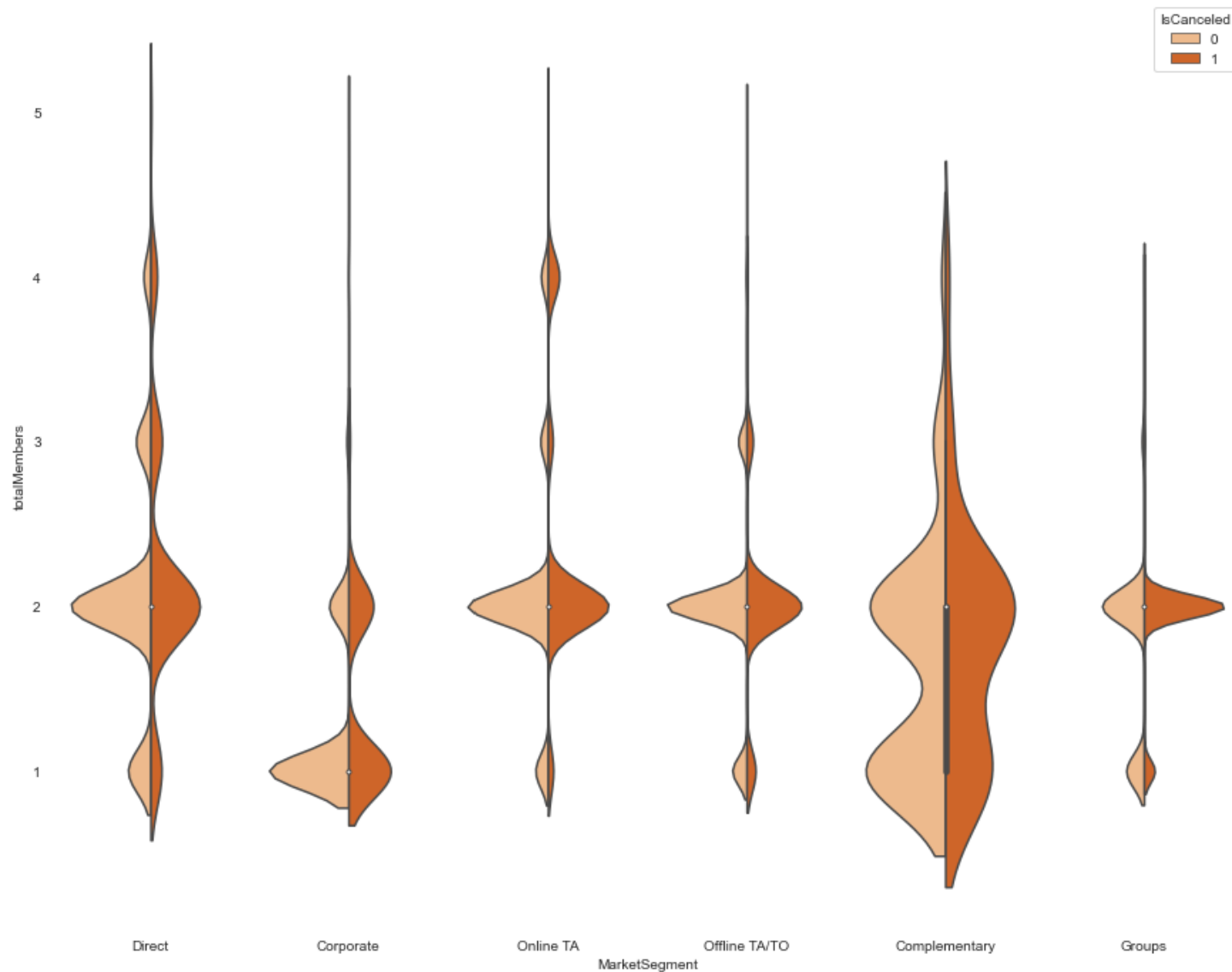
No significant influence of a room being assigned differently on cancelation, it is still beneficial to serve the guests' wishes



Focus on contract customers

There are very few guests from contracts

Having contracts with event management companies, will boost revenue and make it a consistent revenue.



Supported by analysis of corporate

Corporate has the lowest cancelation rate after *offline TA*

Corporate brings single guests that form 17% of our dataset

Thank You