Airbnb New Users : Improving the Conversion Rate

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Introduction

Not every user who creates an account on the website makes a booking. Only 40% of the users who create an account with Airbnb end up making a booking. The aim of this slide deck is to communicate with the marketing and business team at Airbnb in order to develop strategies to improve this number.
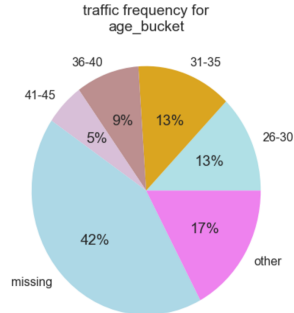
The dataset was taken from `https://www.kaggle.com/c/airbnb-recruiting-new-user-bookings/data`
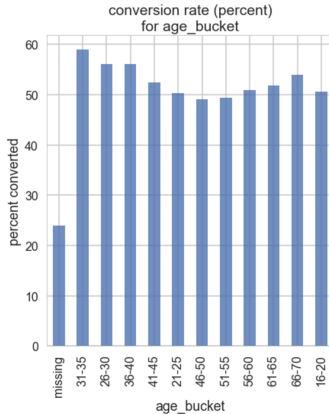
Conversion Rate by the Year
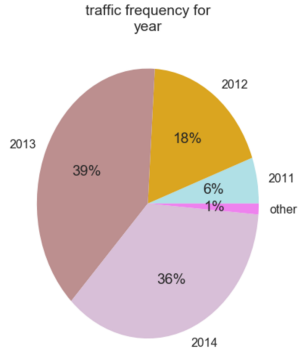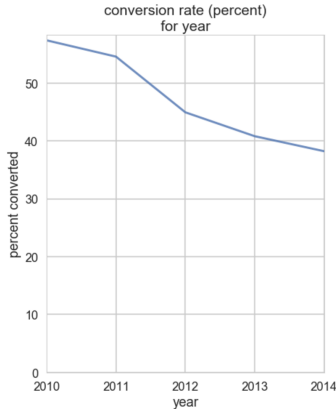
More user accounts, but conversion rate is down. (2014 data is only January-June.)
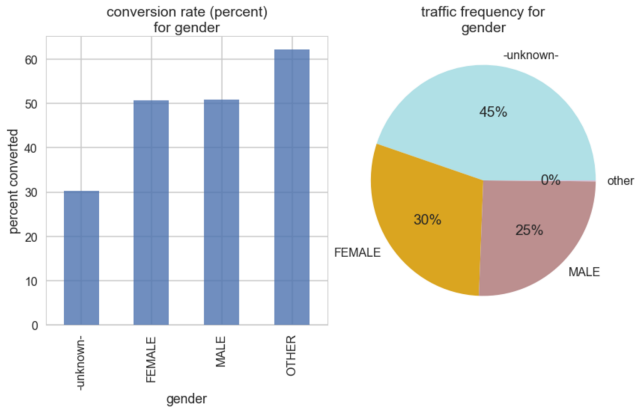
Age Demographics

distribution of ages

Most users are young adults

Age Buckets

Low conversion rate for users with missing age information.

Gender

Low conversion rate for users with missing gender information.

Privacy Concerns?

- 37% of the users do NOT tell us about their age and their gender. Conversion rate only 22% for such users.
- 50% of the users do tell us about their age and their gender. Conversion rate is 52% for such users.
- Users who do not tell us about their age and their gender - are they concerned with privacy or simply lazy?
- A/B testing with friendly messages about privacy reassurance is recommended to determine what is happening.

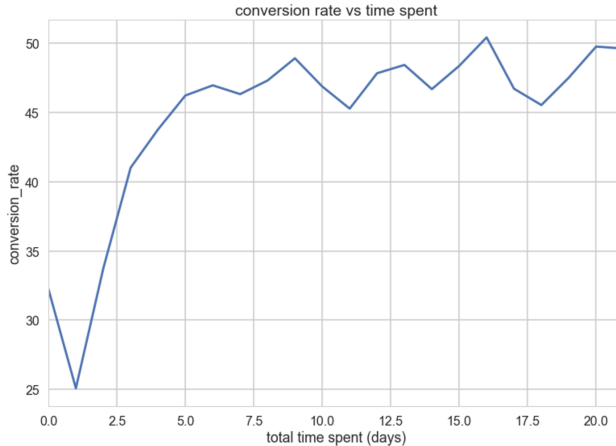# First Device : Desktop better than Mobile
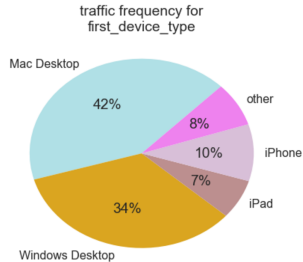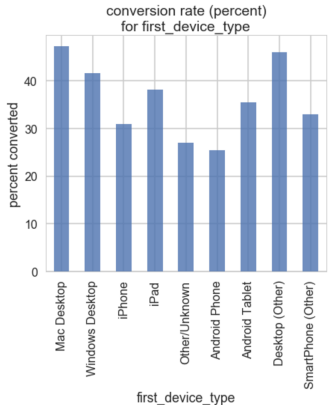
Smaller screens are less effective. Perhaps the mobile website or the app is not as well designed as the desktop website?

User Activity

histogram of activity time (days)
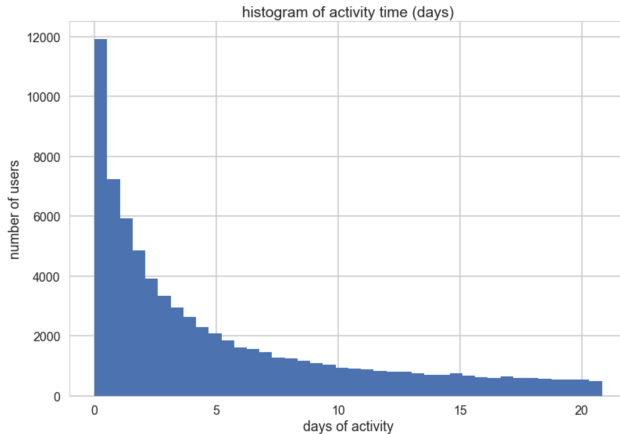
User activity drops fast!

User Activity - Conversion Rate

conversion rate vs time spent

Low conversion rate for users who are active for less then five days

User Activity

- A Large number of users are active for less than five days. Low conversion rate for such users.
- A small number of users are active for longer than five days. High conversion rate for such users.
- Want the users to be active for more time.
- Action: Email the users twice in the week after they create an account and once in the second week to get them to spend more time on the website.
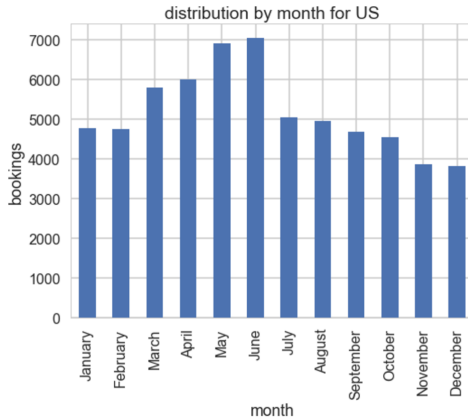
distribution by month for US

Users love the spring and hate the winter (USA)
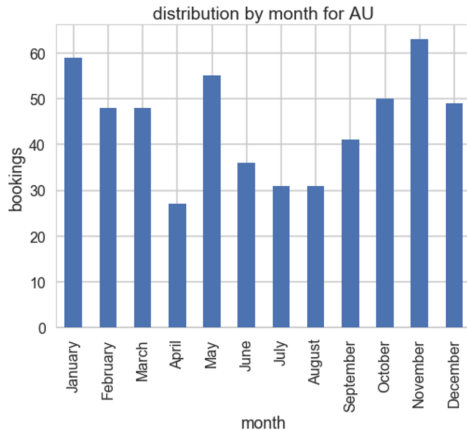
Users love the spring and hate the winter (Australia)

- Users are more likely to make a booking when it is warm in the USA.
- Users are more likely to make a booking when it is warm at their destination.
- Action: Email users with sunny pictures when the spring begins to remind them that they love vacations at sunny places! No need to offer promotions, since people are likely to make a booking anyway.
- Action: Offer special promotions in the Holiday Season to convert the users who create their account in the fall.

Other Recommendations

- A model to identify eager users with high precision has been created. The revenue may be increased by preferentially informing these users about upscale destinations.
- A model to identify hesitant users with high recall has been created. The conversion rate may be increased by offering more promotions to these users.

The End