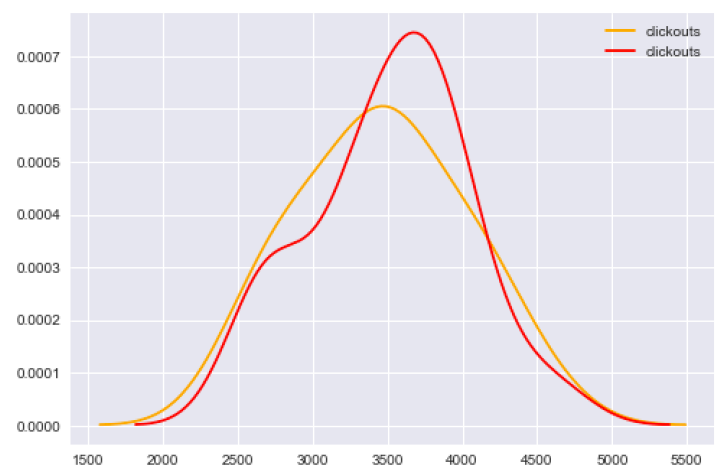
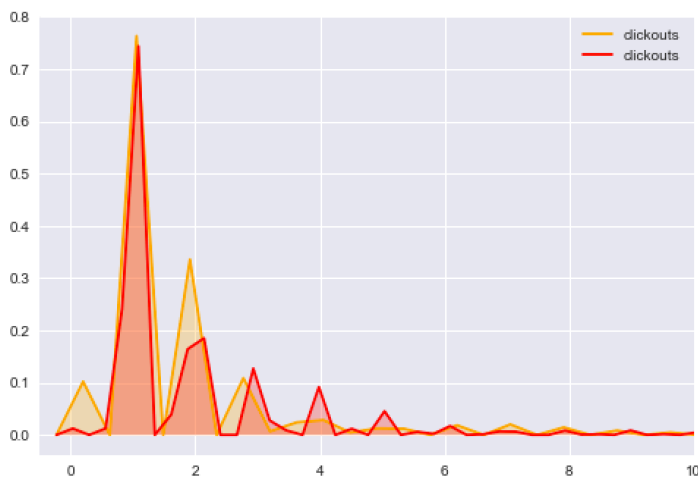
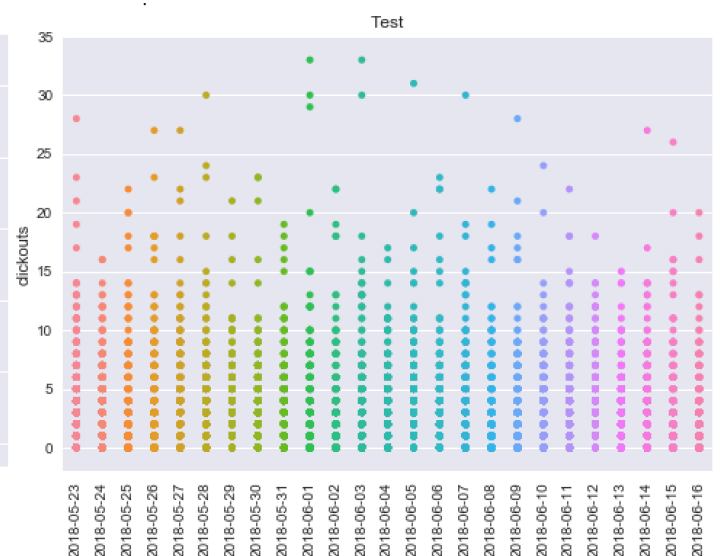
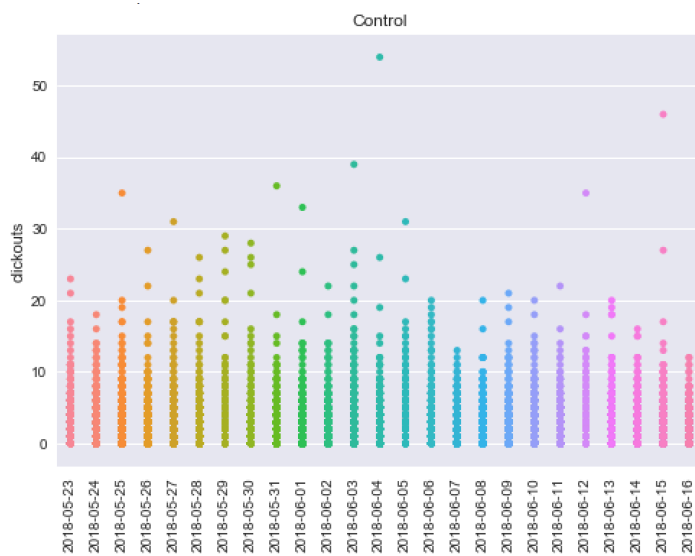


Task 3 - Your recommendations for the A/B test

In comparing the test and control group I choose click out rate, as a measure of performance, especially having in mind this is where the revenue comes from in Trivago's business model. Also I wanted to see if there was any significant difference in engagement with content between the two groups. Hence I chose to visualize some relation between click out rate and also image_ctp between the control and test groups.

KPIs:

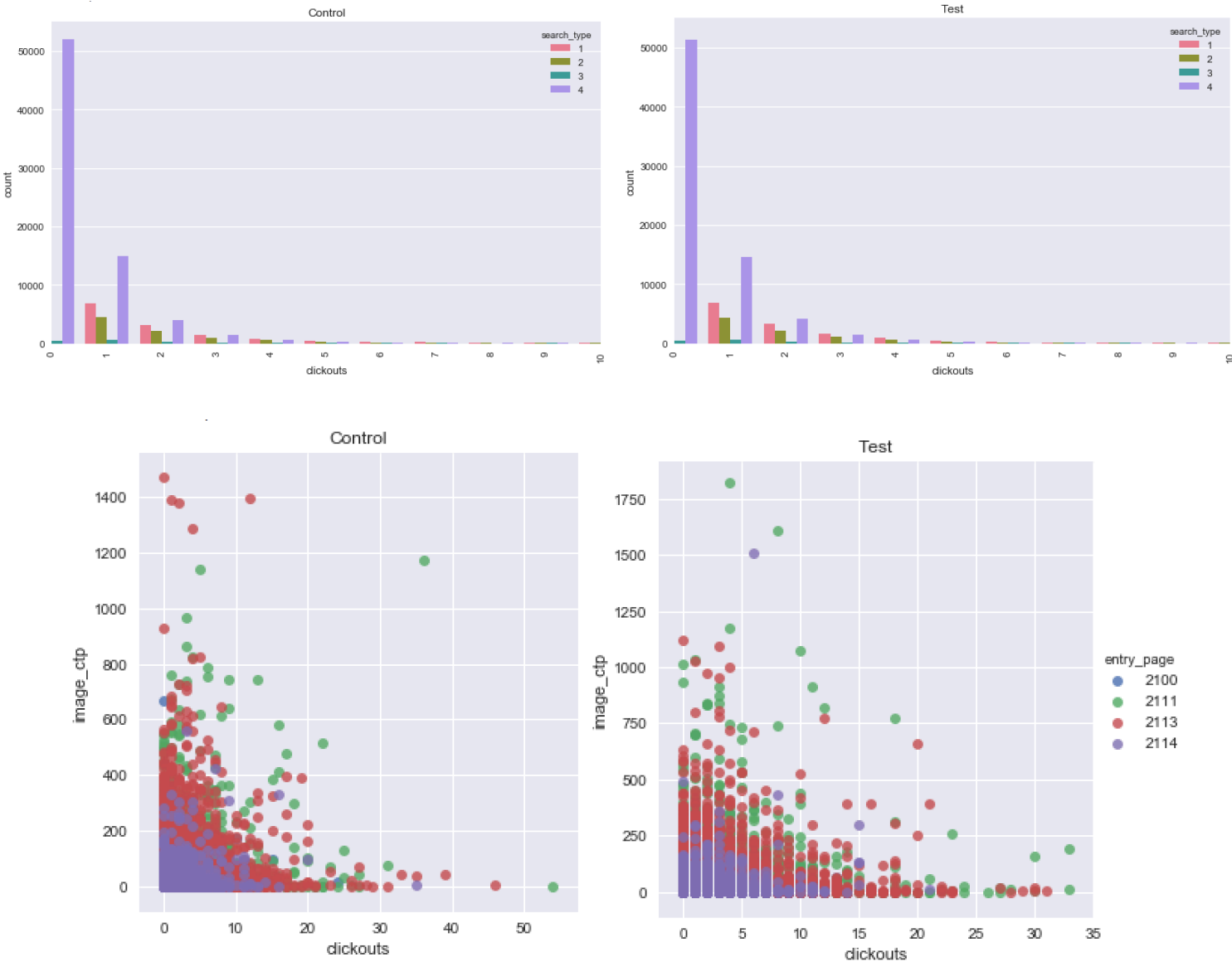
(I) In click out rate there is a bit more variation between the test and control group. The test group has fewer outliers so the data looks more evenly distributed.



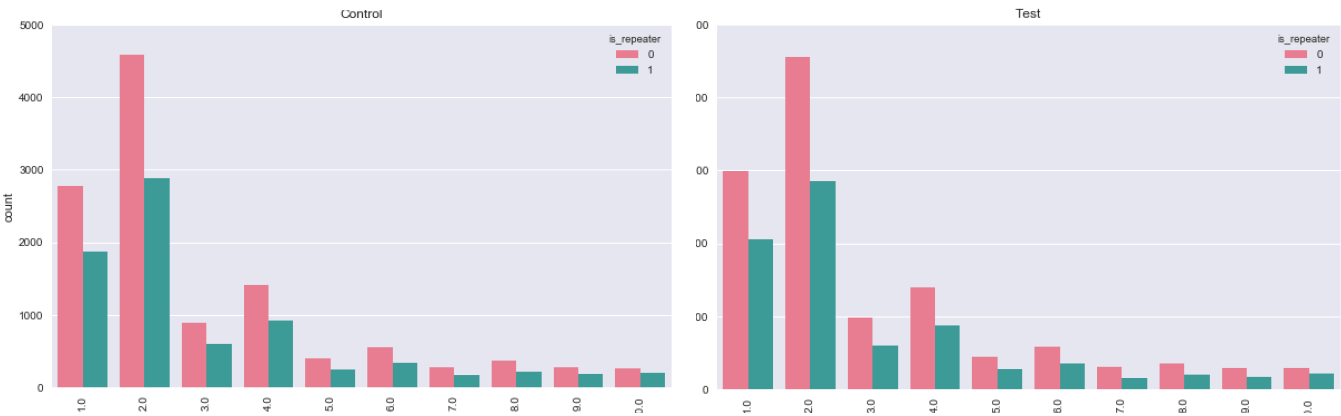
This graph represents test and control click outs

This graph represents the sum of click out rates for the period

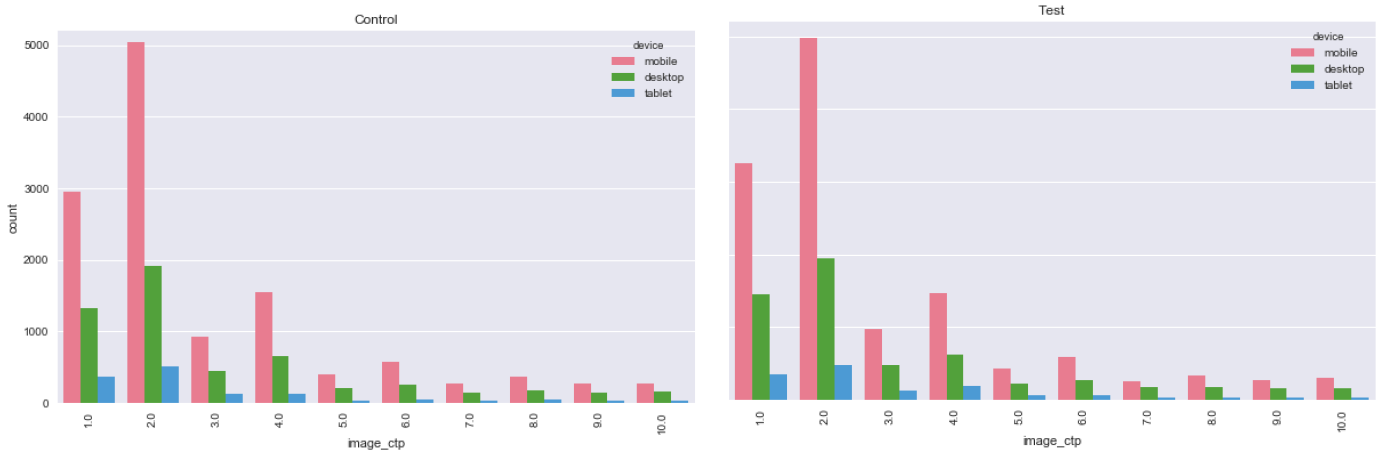
Trivago session analysis by Iwona Smith



(II) In the content I have looked at image information that new and returning users engage with and also the device that the content is viewed on. For me it is quite important to understand the user experience in interacting with the website content which very much depends on the device used.



Trivago session analysis by Iwona Smith



The plot shows no significant difference between test and control groups, but these results could be different if we included more data, and for a longer period. Also there could be differences between KPI alignment if we conducted the test at a different time in the year.

First to say I would be very careful to accept any feature after running the A/B test for such a short period of time, but if we are sure that the validity of statistical significance has been satisfied, I can conclude that since there is no difference in performance we can accept or reject the new feature, but it will not increase the user engagement.

Hence if there is no urgency with the feature being released to the live stream I would wait to gather more data with making the final decision until I am certain the feature is an improvement.

I would also like to see that the logs of data with time of visit to see when people are using the website. Also finding out more about the user location where the search was performed could give us an insight to what type of hotel would be suitable to present him with. People who live in big cities often enjoy different types of hotel to people that live rurally.