

Take Home Challenge Summary - Relax

Objective: Determine Factors most likely to product an 'adopted user'

Technique: Data Wrangle, Model, Explore

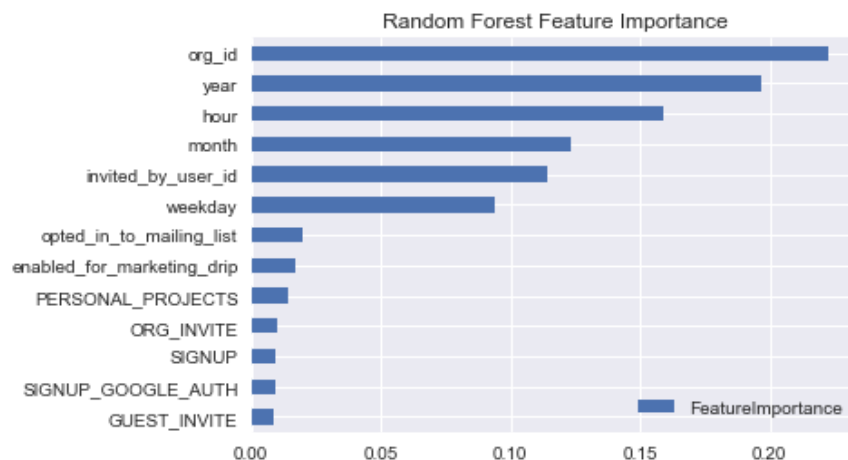


Figure 1 - Feature importance of user data in determining adoption

- Adopted users were defined as having signed on at least 3 times in any given week.
- Figure 1 shows that the most important factors were organization, year of creation, hour of creation, month of creation, which user invited the new user and the day of the week.
- Less significant factors included whether or not they had opted in to receiving emails, and how their account was created.
- AU represents Adopted Users.

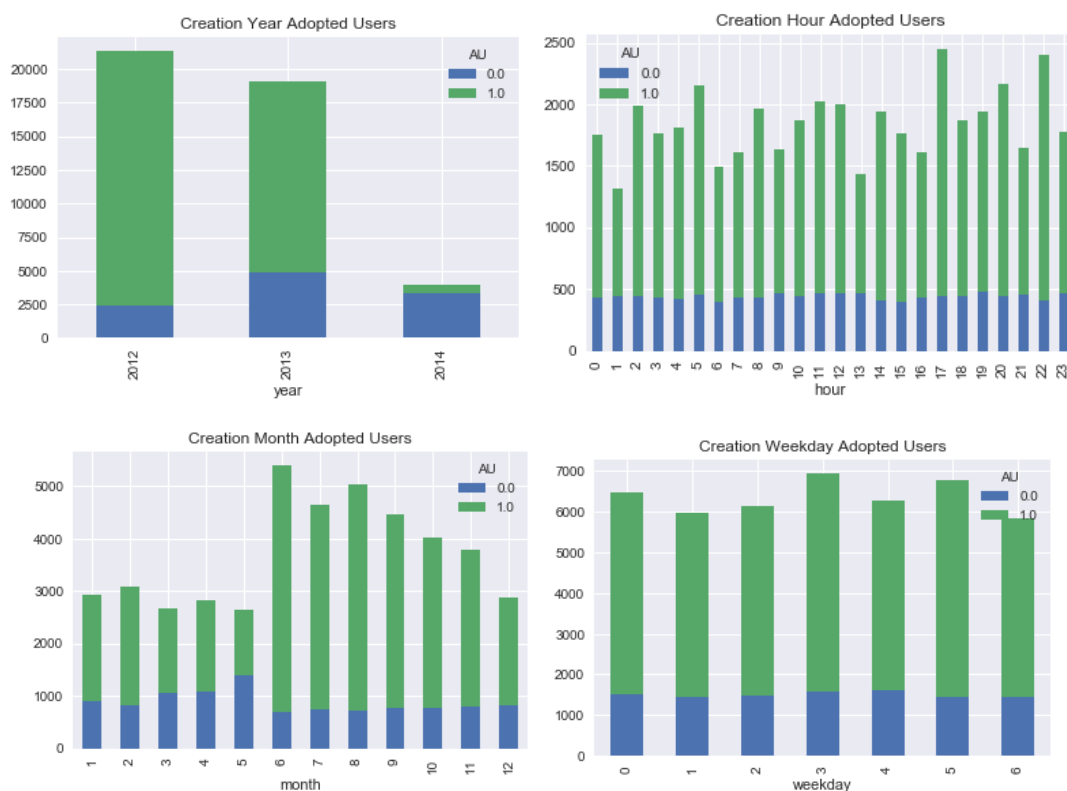


Figure 2 - Adopted User Time Series Plots

Clearly there is a huge drop off in 2014, investigation shows this is likely because the data stops at May 2014 so it is not complete. The data is likely a snapshot up to May 2014 so it is hard to draw conclusions from this.

Proportions indicate that midweek June in the evening is the best time for capturing new users who will become adopted.

These particular users played a big part in getting other users to sign on who became adopted. The mean number of 'Future Adopted Users' was 14 for the whole dataset. This indicates that these particular ten users were outliers and must be investigated.

User ID	Qty Future Adopted Users Invited
4019	152
7816	145
7358	127
6312	121
3623	116
4276	115
1266	110
11960	104

Future Investigations:

I would consider the following in a more indepth analysis:

- Why do these 10 users have such high success rate?
- A/B Testing on the email content to see if adoption can be improved
- User characteristics as they relate to creation source