Adopted User Factors

# Introduction

The goal of this assignment was to analyze data on users from Asana to identify which factors predict future user adoption. An “adopted user” is defined as a user who has logged into the produt on three separate days in at least one seven-day period.

# Analysis

To predict what factors lead to user adoption I created a multi variable linear regression model. I used an OSL Regression model and Figure 1 displays the table of coefficients of each predictor when regressed against adopted\_user, which was a 1 if the user met the criteria for being considered adopted and 0 elsewise. Results are as follows.

# Creation source

Since the creation source variable was a categorical variable, I dummied it out and matched each source against GUEST\_INVITE since that creation source type had the highest correlation with adopted\_user. We see that the other creation soucres have negative coefficient estimates with our response variable, indicating that GUEST\_INVITE is more indicative of adoption than these other sources. When analyzing this further, I created a separate regression of adopted\_user against these creation sources (Table 2). The coefficient estimate was most negative for personal projects at -0.1005334 and was minimally positively correlated with Google signups, but exhibited a p-value of close to 1, so we would not want to use this as a positive indicator.

# Emails

User signup for mailing lists exhibited a positive correlation with user adoption. In analyzing further

(Table 3), enabled\_for\_marketing\_drip exhibited an estimate of 0.0068191, only slightly higher than opted\_in\_to\_mailing\_list. But again, we see high p-values with these estimates. Thus from this model we cannot make any clear assumptions about the relationship between email marketing and user adoption.

# Time Deltas

Time deltas are defined as follows: creation\_delta = time from account creation to last login and last\_login\_delta: time from last login to when this report was created (12/9/16).

From the model, we see the coefficient estimates with the time delta variables. The creation\_delta exhibited the highest value, with a p-value approximately 0 indicating almost perfect estimation. Exploring this relationship further, I regressed only the time deltas (Figure 4) againstadopted\_user and found that creation\_delta has an estimate of 0.8385773 and that last\_login\_delta exhibits an estimate of -0.1223327, indicating it has a slightly negative relationship with becoming an adopted user.

# Conclusions & Recommendations

In conclusion, from this data the best predictors of future user adoption is our creation\_delta variable and the creation source to be GUEST\_INVITE. Again, the creation delta variable was constructed as *the time from account creation to the user’s last login*. Intuitively, this makes sense as users who have been using Asana for a longer span of time are more likely to use the product frequently. As users login more, they are likely to import more information and rely on the platform as a larger part of their day to day tasks, and thus are more likely to be “adopted.” The other predictor variable was creation source as guest invite. Surprisingly personal projects as a creation source did not perform as well as I would have initially thought, but there may be something about the exclusivity and excitement of a friend or colleague inviting you to join the platform that is inticing.

Thus, conclusions would be as follows: get more guest invites sent and keep users logging in frequently (whether this be via push notification, email, or marketing advertisement).