

ASANA: User Adoption Factors

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Introduction

The goal of this project is to analyze Asana's user engagement data and identifies factors that are likely to be indicators of future user adoption. We define an "adopted user" as a user who has logged into the product on three separate days in at least one seven-day period

Data

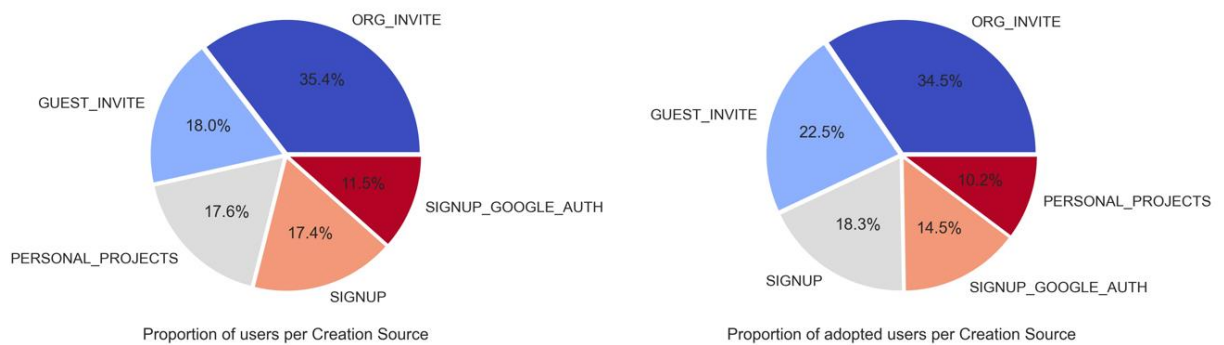
We had access to personal data from 12,000 users who signed up for the product in the last two years. In addition to users' personal information, we had access to user engagement data which has a row for each day that a user logged into the product.

Analysis

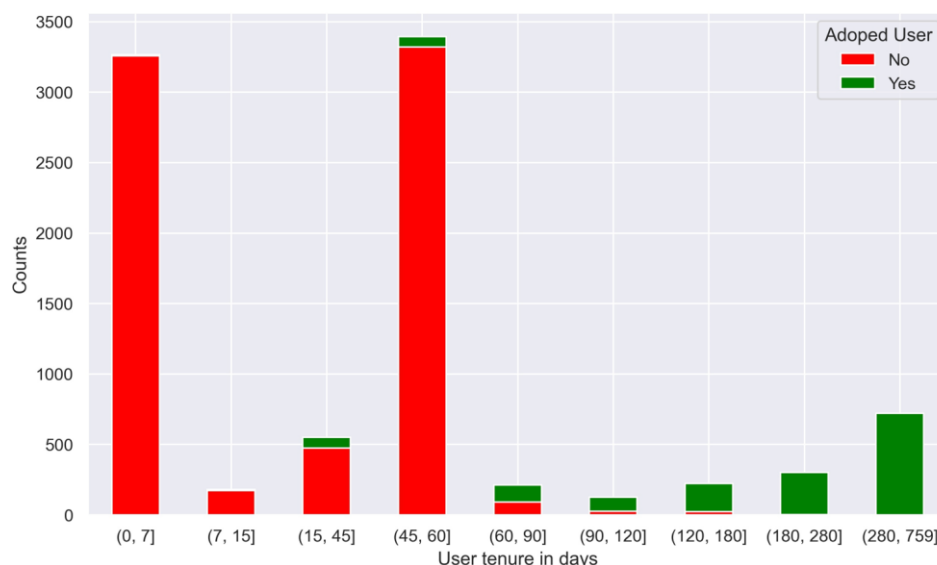
Before building the prediction model I eliminated features that I deemed irrelevant to user adoption prediction (User name, email, and user Id, Invited user Id, Org Id)

For Org Id, I assumed that this was a randomly generated number for different organizations and that this number has no inherent meaning behind it. If this assumption is wrong, then the Org Id variable should be put back in the model

Users invited to an organization as a full member constituted the biggest group for both total users and adopted users, as shown in the charts below



As you may expect user adoption increases with user's tenure. I defined **user tenure** as the time between the day a user created their account until their last recorded log in date. Looking at the graph below, we can see that after 60 days user adoption rate keeps increasing



Modelling and Results

To predict factors that influence user adoption I built a Random forest model with a prediction accuracy of 96%, and an XGBost model with an accuracy of 97%.

Looking into the model's feature importance, it turns out that **user tenure** is the only factor that helped predict user adoption. Removing all other features from the model did not affect the prediction accuracy at all. This makes sense since the way we defined **adopted users** is directly related to their tenure. It doesn't matter if the user was invited as a part of an organization, or if they are working on a personal project, they need a minimum of 3 days to be considered an adopted user

Recommendations

Given the current model, in order to increase user adoption, Asana should focus efforts on increasing users' tenure. For instance since adoption rate significantly increases after 60 days, Asana could set up some type of onboarding program for new user for the first 2 months. This program could include: organizing regular webinars, online tutorials, sending users educational and promotional material via email, to showcase some key features of Asana's product.

Among adopted users about 35% are invited as part of an organization and 22% are guest invites, since these are the biggest groups Asana can market more to these groups since they are more likely to turn into adopted users. At the same time resources should be directed to study and understand why other groups have lower adoption rates and how what improvements can be done to better serve smaller groups of users.