# Relax Inc. Challenge Report

The datasets contained basic information and engagement data of 8,823 users. There 1,656 adopted users. I investigated which factors are most important in determining user adoption. I found the length of user history was by far the most important factor. User history is defined as the number of days from account creation to the latest session. If a user was still using the service >100 days after account creation, he/she was very likely to be an adopted user. User with history > 200 days was always an adopted user (Figure 1). New users were less likely to be adopted users, but over the past two years, user adoption rates did not change significantly.

Figure 1. Distribution of adopted and non-adopted users based on user history
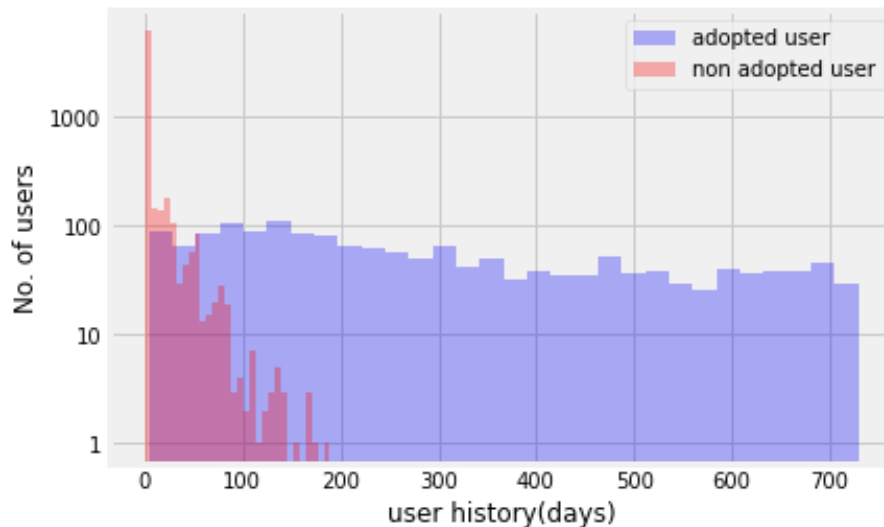
The next most important factor was the source of users. Users invited by other users and users signed up to do personal projects were more likely to become adopted users (Table 1).

Table 1. User adoption rate based on source of users.

	Guest Invite	Organization Invite	Personal Projects	Sign Up	Sign Up with Google Auth
Adoption Rate	23.2%	18.0%	22.5%	15.9%	17.3%

I found whether user opted in to email list or marketing drip had no impact on whether the user was an adopted user. A random forest model based on the dataset can predict user adoption with >95% accuracy.

Based on the finding, I recommend that an effective way of growing adopted users might be encouraging existing users to log in and use the software after they had accounts for a while. Encouraging users to invite others, and offering incentives for people to work on their personal projects using the software might also be somewhat effective.

Detailed user response data, such as whether users responded to certain marketing moves, might be valuable data to analyze which ways are the most effective in attracting adopted users. In this dataset, only organization ID was provided. More detailed information about the organizations would be useful in finding out what type of organization should Relax Inc. target for growth of adopted users.