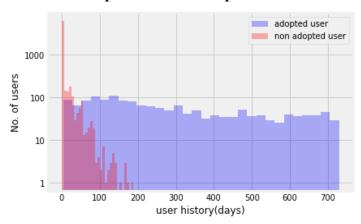
## Relax, Inc. Take-Home Challenge Findings

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The user data and user engagement datasets were imported into a notebook to answer the question, which factors predict future user adoption? It contains data of 8,823 users. Among 1,656 are considered adopted users. I found that the length of the user history was the most important factor in looking for user adoption. The user history is the number of days from when the account was created to the latest session. If a user is still using the service more than 100 days after account creation, they are likely to be considered an adopted user. A user with greater than 200 days of history will always be an adopted user.

## Distribution of adopted and non-adopted users based on user history



The next important factor in user adoption was the creation source of users. Users who were invited by other users and users who signed up to do personal projects were more likely to become adopted users.

Creation Source	Guest Invite	Organization Invite	Personal Projects	Signup	Signup with Google Auth
Adoption Rate	23%	18%	22.5%	15.9%	17.3%

There was no impact on whether a user is considered an adopted user if opting in for the mailing list or marketing drip. Running a random forest model on the dataset predicted user adoption with a little more than 95% accuracy.

Based on these findings, I can recommend that an effective way to grow user adoption would be to encourage existing users to log in and use the service after having accounts for a while. Users can be encouraged to invite others and offer incentives for people to work on personal projects using the service may be somewhat effective.

Many users are influenced to adopt based on the principle of being part of an organization or in whatever way they were invited. Out of the ways users signed up, guest invitation and personal projects have the highest adoption rates among the categories of creation source.