

Relax Challenge Report

Initial Exploration

I found that 1656 users (or 13.8%) are adopters. I created a few features such as whether a user has invited others and how many, whether a user was invited by an adopter, the size of the organization the user is a member of, and the email provider a user used to sign up. I found that most users are part of organizations of less than 50 members, and that most users do not invite others (see figures 1. and 2.). The most common method of signup, however, is to be invited as a full member by an organization.

Analysis

I started by performing dimensionality reduction to see if adopters were systematically different than non-adopters (see figure 3.). Unfortunately there does not appear to be a clear pattern among adopters, and so attempts to predict adoption will likely make many errors. I did however fit a gradient boosting classifier and a support vector classifier to the data, with the gradient boosting performing better (see figure 4.). We can take a look at the feature importances to see which factors are most likely to influence adoption (see figure 5.).

Suggestions

The most important factor is organization size, with members of larger organizations being less likely to adopt. It might be most beneficial to promote the product to smaller teams where it is more likely to be adopted. Being invited by an existing adopter is also a predictor of future adoption, so we should target existing adopters and encourage them to invite other users whenever possible. Finally, users who sign up for personal projects are less likely to become adopters. Overall, it appears the product is performing best for small to medium sized organizations. To increase retention we should focus our marketing to that audience.

Figure 1.

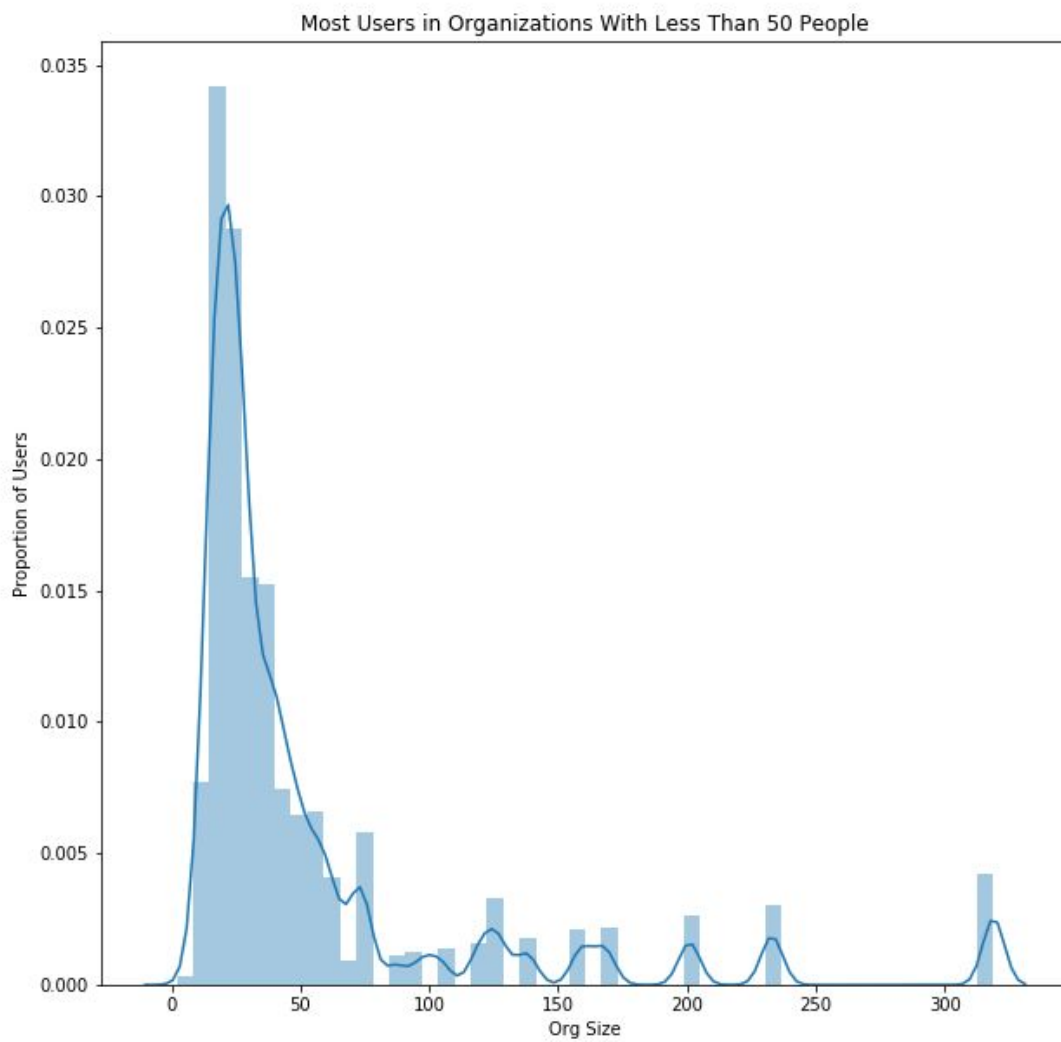


Figure 2.

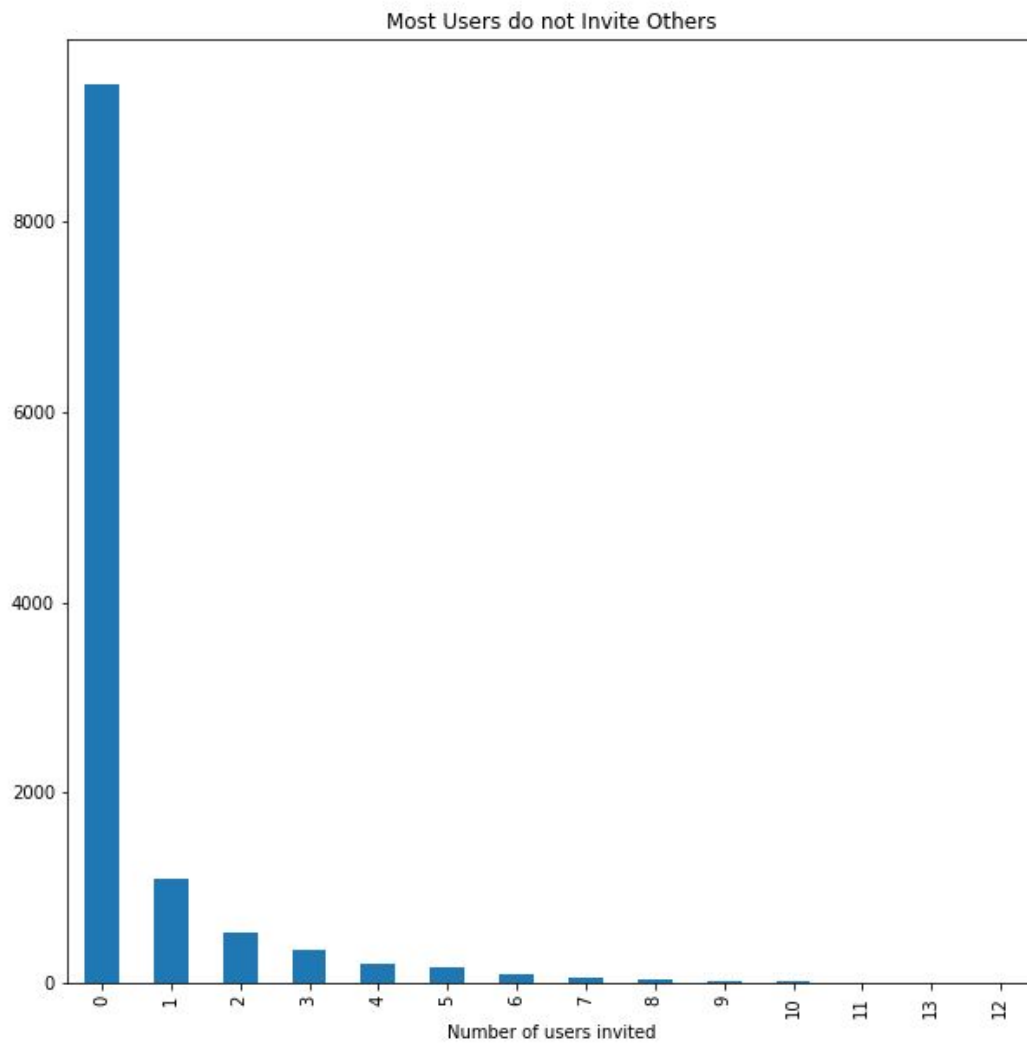


Figure 3.

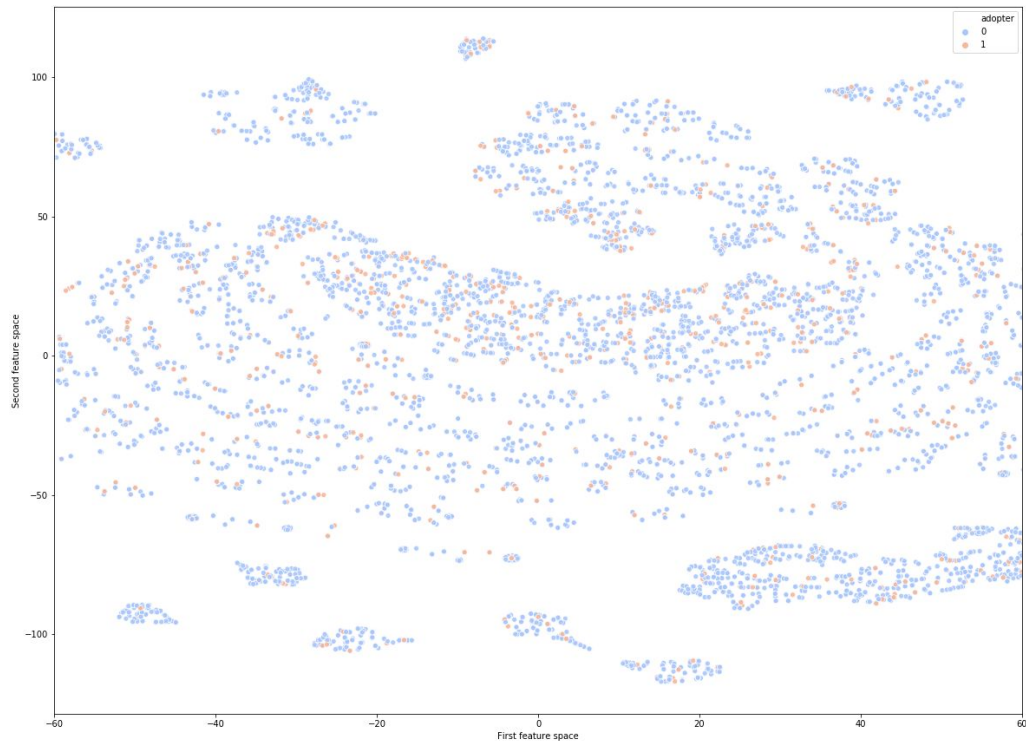


Figure 4.

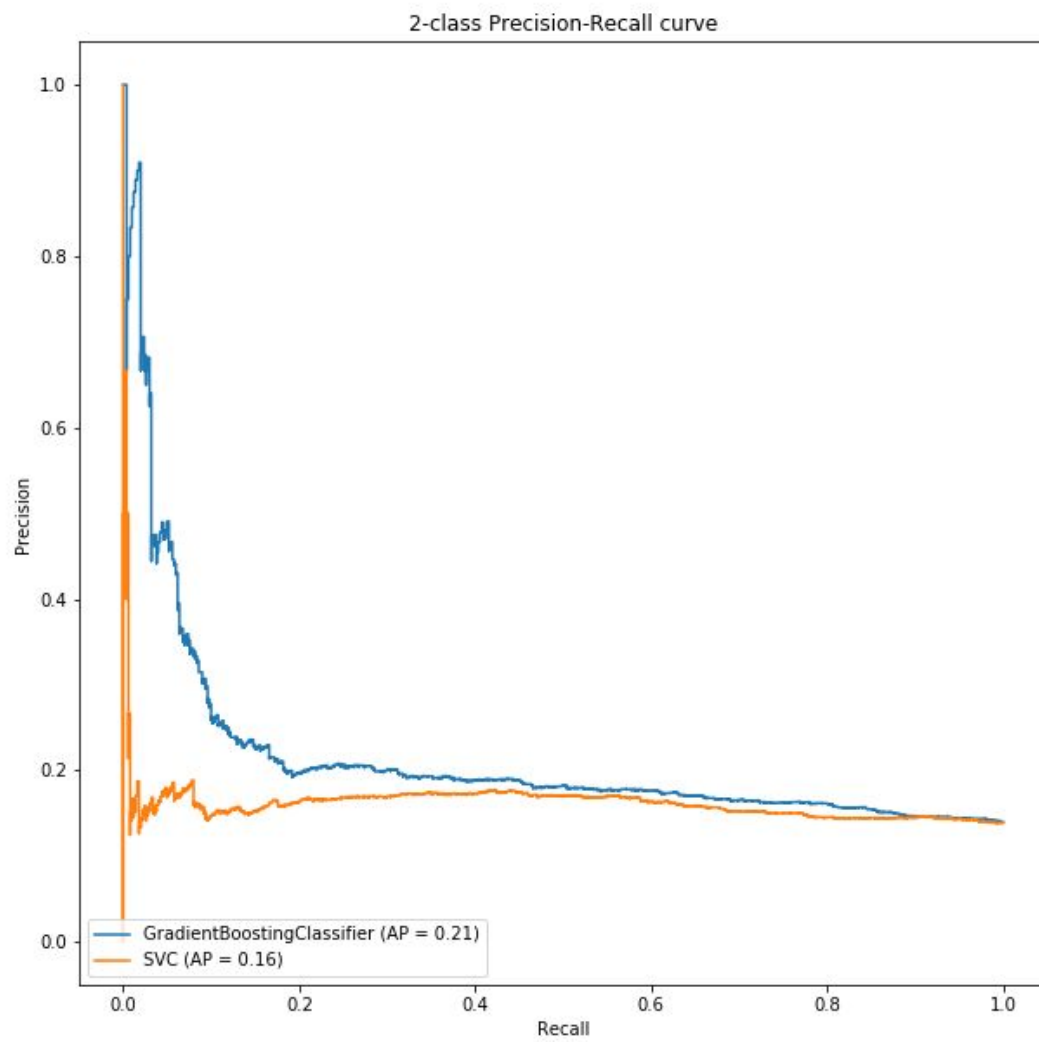


Figure 5.

