# Take Home Challenge: Predicting User Engagement with EDA
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Adopters of our software were defined as those users who have logged in at least three times in any 7 day period since they created their account. That user population was identified and compared with the non-adopting population, and the data was evaluated to detect noticeable differences.

1. *Source of enrollment[1]:*
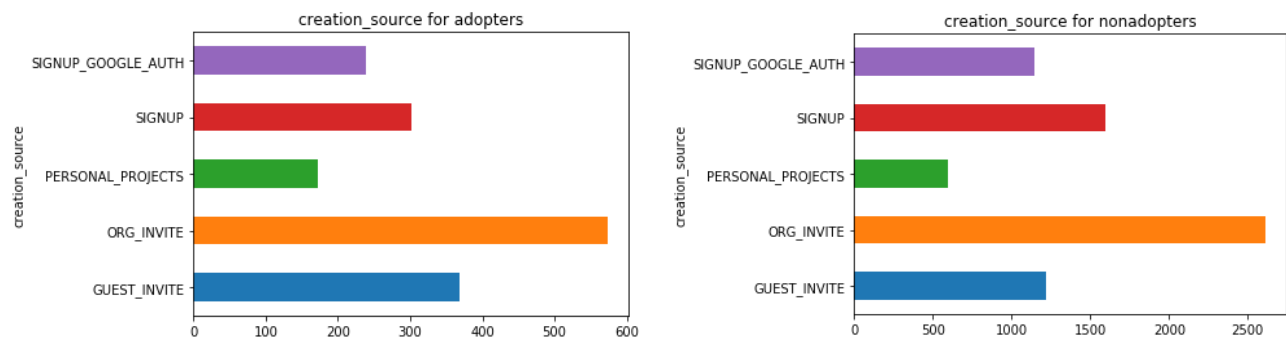
The distributions look comparable, except that the adopters seem more slightly likely to have come from guest invites, and nonadopters seems slightly more likely to have signed up via the website. These differences are not as significant as the following.

2. *Willingness to opt-in[2] and continue receiving marketing materials[3]:*
No significant difference in distribution (< 1%)

3. Number of users from organization[4]:
A clear difference in the distributions suggests smaller organizations are more likely to adopt.
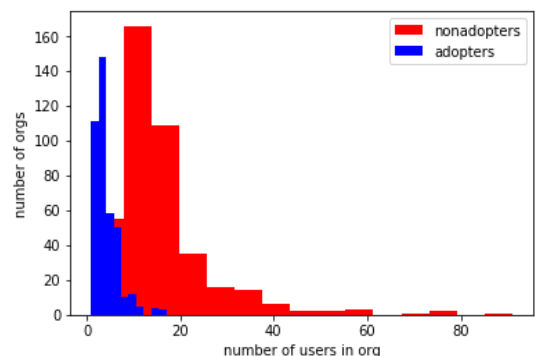
4. BEST FINDING: *Invitation from another adopter[5]*
Invitation from another adopter increases the chances a user will adopt from 18 to 28%

Recommendations:
1. Explore findings with cross-functional team
    a. Is there an opportunity to build incentive program for referrals?
    b. Are we marketing to organizations of the right size?

As report was requested in the space of an afternoon, this analysis was restricted to data cleaning, EDA, and superficial statistical analysis.

Database Key: 1: creation_source, 2: opted_in_to_mailing_list,
3: enabled_for_marketing_drip
4, 5: See codefile