Given the provided data sets for Relax Inc.'s users and user\_engagements, there are several different factors that can effectively predict future user adoption. In order from least to most predictive power, those factors are:

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org_id, users_in_org, days_since_last_session,
total sessions, and days active.
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The factors with little or no predictive power are:

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opted_in_to_mailing_list, enabled_for_marketing_drip, invited by user id, and creation source.
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In the data wrangling process, a few columns were manipulated or reconstructed to be more suitable for making predictions. The following changes were made to columns in the original dataset.

- org\_id: In the original users dataset, the org\_id column describes the organization (group of users) to which a user belongs. org\_id is positively correlated to adopted users, meaning a larger org\_id indicates a higher likelihood of a user being adopted.
   Assuming org\_id's are assigned sequentially, users in organizations created more recently are more likely to be adopted.
- 2. users\_in\_org\_id: This new column was constructed from the org\_id column provided in the original users dataset. Instead of one-hot encoding each organization, the values in the org\_id column were replaced with the number of users in the user's organization. This factor is negatively correlated with user adoption, meaning users with a larger amount of registered users in their respective org are less likely to be adopted.
- 3. days\_since\_last\_session: This column was constructed from and replaced the last\_session\_creation\_time column in the original users dataset. This column is a count of the number of days since a respective user's last session. With a negative correlation to user adoption, users with fewer days since their last session creation are more likely to be an adopted user.
- 4. days\_active: This column was constructed using the difference in days between a user's last session date and the date of a user's creation date. This variable has the strongest direct correlation to user adoption, meaning users with a larger number of days active are extremely likely to be an adopted user.
- 5. total\_sessions: This column was constructed by counting each user's instances of engagements in the engagements dataset. This factor has the strongest negative correlation to user adoption, meaning users with a larger number of total sessions are less likely to be considered adopted.