

Objective

We would like you to explore, analyze, and tell a story using the attached data. You can use whatever tool(s) you'd like to perform your analysis (e.g. Excel, Python, R). You should write up your analysis in a document (e.g. word, google doc, pdf) that will be shared with the team. If invited for the next round, you will be expected to discuss your work with one of our interviewers. Your document should include the following:

- A summary of your analytical methodology, including but not limited to any assumptions you made about the data, the analytical tools/techniques you used, and the key questions you explored
- Any key findings, including at least one data visualization (chart/table)
- A recommendation on what you would do next with your work

We expect that this project should take no more than 4 hours of your time.

The Data

The data for this project represents how our users use Tinder. We collect data on every person a user swipes on to the number of messages that are exchanged.

Data Dictionary

user_id : unique identifier for each user

day : the day in which data was collected on the user

age : the user's age on that day

country : the country where a user resided on that day

gender : the user's gender (female or male)

device_type : the type of device the user was using on that day (android or ios)

is_active_user : whether the user opened the app that day (1 = Yes, 0 = No)

swipes_sent : the number of people the user swiped on that day

swipes_received : the number of people that swiped on the user on that day

likes_sent : the number of people the user swiped right (liked) on that day

likes_received : the number of people who swiped right on (liked) a user on that day

matches : the number of people the user matched with on that day. matches occur when two people swipe right on (liked) each other

messages_sent : the number of messages the user sent on that day

messages_received : the number of messages the user received on that day

Scoring

- Creativity - How do you approach this assignment? What questions do you ask? What data do you focus on?
- Insights - Do you produce interesting observations/hypotheses/conclusions about user behavior from this dataset?

- Business Results - Do your insights lead to actionable recommendations for how we can improve our app or marketing?
- Quality of Deliverable - Do you produce a clear, concise, and compelling explanation of your methods, insights, and recommendations?

Deliverable

Please create and send us a document (word, google doc, pdf) that summarizes the story and your approach (see Objective). Also, send us any supporting work product (code, Jupyter notebook, excel file) used in your analysis/model.