

Data Scientist Coding Exercise

Member Referrals

The CEO has come to your desk and explained that we want to increase signups from [our referral scheme](#). As part of this effort, we are keen to understand at what point in the member lifecycle members refer other people. There are 2 CSV files attached to your email that contain information on our customers and their referral behaviour:

- The Customer Info CSV contains information on customers and metadata for each customer. It is a representative sample of the whole customer database
- The Referral Info CSV is a log of sign-ups we have received from the referral channel

Use this information to answer the questions below:

1. When do members refer?

(Try to think about each member lifetime, starting from when they sign-up to Bulb.

The number of Bulb members is growing very quickly. A lot of Bulb members have not been with Bulb for very long. Think about how this might affect your conclusions.)

2. Does the channel members are acquired from significantly impact how they refer? Do you think we need a larger sample size to be sure?

3. We can send an email to members to invite them to refer their friends. We can choose when, and to whom, we send the emails. How would you suggest we proceed?

You should aim to spend 2-3 hours on this task. If you have to make some assumptions or leave some 'future work' in the interests of time, no problem, just make a note in your submission.