Congratulations on making it to the next step in your recruitment process with Tala!

Overview:

Tala Credit is an Android application developed by Tala (formerly InVenture) which allows users in Kenya and Philippines to apply for a loan through a simple mobile loan application, immediately determine if they qualify using our credit scoring algorithm, and then deliver credit instantly to a qualifying user’s mobile money account.

All loans currently range from the equivalent of $10-50 USD, could have 3 installments , and interest rates that range from 11%-15% of the loan amount. Repayments are made via mobile money to Tala’s corporate account. Many of our borrowers take out multiple loans, but one can only qualify for additional loans once they have paid off their current loan.

We will be launching in Tanzania shortly. To date we have done untargeted advertising over Facebook but now that we have some repayment information on the market we will be wanting to target our Facebook ads to the those who have the highest likelihood of repaying.

Challenge:

Your job will be to take the sample raw data sets provided here and find audiences that our growth team can use to target their marketing efforts.

**Please note that the data sets are confidential property of Tala and should not be shared under any circumstances.**

Provided Data:

* dataAnalystChallenge\_people.csv - loan application survey questions
* dataAnalystChallenge\_repayment.csv - loan disbursement and repayment dates
* dataAnalystChallenge\_device.csv - device characteristics
* dataAnalystChallenge\_mobilemoney.csv - a sample of mobile money transactions per user

See the codebook on the following page for details about the data included in these files.

Facebook targeting fields:

* Mobile device type
* Minimum OS
* Gender
* Age
* Type of wireless connection (mobile or WiFi only)
* Demographics
* Education
* Work
* Financial (income/net worth)
* Home ownership
* Generation

We ask that along with any source code or scripts, you submit a concise report including any tables or charts that help tell the story, and detail your logic and methodology, interesting findings, data concerns and any future work you could pursue with this data set.

We are also interested in any thoughts on other data that would be useful to answer this question.

We look forward to seeing your results soon!

**Tala Data Codebook**

dataAnalystChallenge\_people

|  |  |  |
| --- | --- | --- |
| **Col** | **Variable** | **Description** |
| 1 | person\_id\_random | unique borrower identifier |
| 2 | birthday | yyyy/mm/dd |
| 3 | gender | M = male, F = female |
| 4 | signup\_time | time of signup in East Africa Time |
| 5 | fb\_friend\_count | number of Facebook friends upon sign-up |
| 6 | current\_home\_years | number of years in current residence |
| 7 | current\_home\_months | number of months in current residence |
| 8 | living\_situation | stated living situation (free form optional) |
| 9 | current\_job\_years | number of years in current job |
| 10 | current\_job\_months | number of months in current job (<12) |
| 11 | education | stated level of education |
| 12 | how\_much\_paid | value provided by applicant in local money |
| 13 | how\_often\_paid | frequency of payment provided by applicant |
| 14 | referral\_source | stated referral/sign-up source |
| 15 | outstanding\_loan | stated existence of an ongoing loan with other financial institutions |
| 16 | mobile\_wallet\_how\_often | stated use of a mobile wallet – recoded from numeric to text values, numeric are weekly usage |
| 17 | relationship\_status | stated relationship status (married, single, etc.) |
| 18 | is\_employed | employment status (yes, no) |

dataChallenge\_repayment

|  |  |  |
| --- | --- | --- |
| **Col** | **Variable** | **Description** |
| 1 | person\_id\_random | unique borrower identifier |
| 2 | nLoans | total loans taken by borrower |
| 3 | loanStartDates | dates of loan disbursement |
| 4 | loanPaidDates | dates of full loan repayments |
| 5 | currentDate | date that the data was extracted |

dataChallenge\_device

|  |  |  |
| --- | --- | --- |
| **Col** | **Variable** | **Description** |
| 1 | person\_id\_random | unique borrower identifier |
| 2 | device\_model | device model name |
| 3 | hasDualSim | technical specification |
| 4 | hasWlan | technical specification |
| 5 | hasBluetooth | technical specification |
| 6 | Tala\_app\_version | version of Tala app installed on the device |
| 7 | android\_version | version of Android installed on the device |

dataChallenge\_mobilemoney

|  |  |  |
| --- | --- | --- |
| **Col** | **Variable** | **Description** |
| 1 | person\_id\_random | unique borrower identifier |
| 2 | date | date of transaction in local time |
| 3 | transaction\_type | type of mobile money transaction (i.e. send\_to\_savings) |
| 4 | direction | in/out of mobile money wallet |
| 5 | amount | transaction amount |