Growth Analyst Case Study

The Purpose

This assignment has been designed to give you an opportunity to try out a real task that you would face on a daily basis if selected for this role at TransferWise. You need not have prior experience with marketing, growth or international transfers to do well on this assignment.

The Guidelines

- AUDIENCE: Consider the our data-savvy leadership team (Founders + heads of growth, marketing and product) as the core audience for the output of your analysis & dashboards below.

- EFFORT: This is not a timed exercise, but we expect this should take 4-6 hours of effort to complete.

- INPUTS/OUTPUTS: Data has been provided in a single excel file on different tabs (like tables in a database). Use whatever tools you like to complete the assignment. Please provide your final output in a word/google doc or ppt/google slides (your choice). Whatever you produce has to stand on its own (you're not presenting it face-to-face). If it's key to the output, you're welcome to include a dashboard you've built in excel or some other tool, but otherwise you don't need to "show your work."

- ASSESSMENT: The exact assessment criteria are not available, but it are clearly defined. If you wish - regardless of the outcome of the assessment - we can provide you with feedback on your results.

- QUESTIONS: You can ask us questions (email   needed, but to be fair to all candidates, we may not be able to answer. Be aware that it may take a few hours (especially outside business hours) to respond.

The Tasks

1. One of the most important metrics in Performance Marketing is the Lifetime Value (LTV) of our new customers. In order to estimate how much we could spend to recruit new users through marketing campaigns, we should know how much value they will generate over their lifetime. Unlike fixed price subscription services such as Netflix, the LTVs of our customers vary significantly. Certain customers make more transfers than others or use different transfer routes. As Growth Analysts, it is important to be able to present an accurate view of LTVs of different customer profiles to our marketing teams.
   a. Using the data described below, can you find some user groups that are more valuable than others? If so, which categories can be used to best separate these users?
   b. What advice would you give to our Performance Marketing team using this analysis?
   c. The data and tasks provided in this assignment are limited. What would you like to build or look into next if you joined us at TransferWise to shed further light on these questions?

2. Create a dashboard on which we can track the performance of our marketing campaigns on a weekly basis. Build a one-page dashboard or report to help us measure in which ways and in which subcategories performance is getting better or worse. The report should only show the last 12 weeks performance.

3. Show us you're an SQL pro: For one of the charts, tables or components you've created for the dashboard, write the SQL statement that would generate it.

The Data

Data for Question 1 (Yellow Tabs)

LOOKUP_USER
Sample of user data of March 2017.
- **user_id** - unique ID per user account
- **user_create_timestamp** - the date at which the user made their account
- **user_market** - the geographical market to which this user belongs
- **attribution_channel** - the marketing channel that recruited this user
- **product_used** - the TransferWise product this customer has used

REPORT_LTV
Table that contains the LTV and transfer amount of users that joined in March 2017.
- **user_id** - unique ID per user account
- **lifetime_value** - the total value the user has created during their lifetime as a customer
- **lifetime_transfers** - the total transfers the user has made during their lifetime as a customer

Data for Question 2 (Green Tabs)

USER_ATTRIBUTION

User information filtered to include only the last 16 weeks (as of Oct/14), based on ad_click_timestamp

- **user_id** - unique ID per user account
- **ad_click_timestamp** - timestamp of when the user clicked the advertisement that made him convert later on
- **ad_click_week** - same as above, converted into week format
- **user_conversion_timestamp** - timestamp of when the user eventually made their first transfer
- **user_conversion_week** - same as above, converted into week format
- **user_age_years_bucket** - age of the user
- **marketing_channel** - the marketing channel that recruited this user
- **marketing_country** - the country in which the ad ran that recruited the user
- **lifetime_value -** the lifetime value of the user

MARKETING_FINANCIALS

Table that contains the aggregated spend on our advertisements. Filtered to include only the last 16 weeks (as of Oct/14).

- **ad_click_week** - week at which the user clicked the advertisement that made him convert
- **marketing_channel** - the marketing channel that recruited this user
- **marketing_country** - the country in which the ad ran that recruited the user
- **marketing_spend** - the amount we spent on advertisements for this week, channel, and country