EDD Homework

There is an attached csv file to support this assignment. In this file, there are 100k rows of transfer data randomly selected and modified. Each line represents one transfer request*.

* Modifications: payment methods simplified, irrelevant columns removed. Growth is hidden by random selection. Revenue is hidden by removing fees.

TransferWise enables good people to move money across the world in a fair, transparent, fast and convenient way. Unfortunately, there are not only good people in the world and thus, the world has evolved into the current state: there are regulatory bodies in each country that impose some kind of rules on us, which force us to ask our Customers all sorts of things. This creates quite a lot of friction though and might not be the most efficient way of doing things.

One option to reduce friction is to streamline the way we inquire the necessary information from the customer - automated ID document checks for instance.

The other way of tackling the problem could be to be smarter about assessing customer risk and ask the information accordingly. Given that we are able to influence the regulators to change the regulations of course. Let's explore this.

Questions to answer:

1. Looking at the data, which customers would you deem risky based on their behaviour?
        a.) Try to show through data and clear visualization strange behaviour that you think is worth further monitoring.
        b.) Based on that data, what kind of limits/restrictions would you set to catch any potential bad customers before they manage to do any harm? Show how our customers would be impacted by these limits and hypothesize the likely behaviour models that would emerge from the change.

Consider in your answers: What impact your proposed approach will have and list any trade offs that need to be considered when implementing these (e.g. high cost to build, run, operational impact)

 2. What kind of info would you like to acquire from/about these customers in order to trust our service to them or deny it? How would you go about getting this info?

Be creative - there are no wrong or right answers here. Imagine that you would need to convince our product leads that we should take on a new approach to when and how do we stop our customers to check up on their identity. How would you go about it? Think of the above questions as guidelines in how to do it.

Supporting dataset: Please find the attached csv file to support this assignment. In this file there are 100k rows of customer payment data randomly selected and modified. Each line represents one transfer request.

user_id - Unique ID for the customer
request_id - Unique ID for the transfer request
target_recipient_id - Unique ID for recipient
date_user_created - Date when user was created
addr_country_code - Sender Address country code
addr_city - Sender Address city
recipient_country_code - Recipient country code
flag_personal_business - Business payment vs personal
payment_type - Payment method used to upload money
date_request_submitted - Date at which the customer set up a transfer
date_request_received - Date at which we received the customer's money
date_request_transferred - Date at which we payed out to the recipient
invoice_value - Amount that the customer is sending
flag_transferred
payment_status - Payment status
ccy_send - Currency where the customer sends from
ccy_target - Currency where the customer sends to
transfer_to_self - Recipient type.
sending_bank_name - Sending bank name
sending_bank_country - Sending bank country
payment_reference_classification -
Reason of the transfer if the customer has entered it
device - Platform of the customer
transfer_sequence - How many transfers has the customer made so far
days_since_previous_req - Days since previous request
First_attempt_date - Date of the first transfer attempt
first_success_date - Date of the first successful transfer

Tip:

Firstly, see how TransferWise works. Secondly, focus on the most important factors and try not to boil the ocean. In addition, you can spend 3 hours, 3 days or 3 weeks on the assignment. It is up to you to decide when to start and when to finish. Good luck!