

Product Analytics Challenge

As discussed on the intro call, from the moment when you've received that email, you have 3 hours to analyse the problem and send us the results back.

If you're applying for a data analyst role, you can use any analytical tool to parse and analyse the data.

If you're applying for a data scientist role, you can use only Python.

Please show all your work (including your code) and assumptions as well as provide a pdf / keynote with your findings (outcomes).

Business context

Deel clients may add funds to their Deel account using their credit and debit cards. Deel has partnered with Globepay to process all of these account funding credit and debit card transactions. Globepay is an industry-leading global payment processor and is able to process payments in many currencies from cards domiciled in many countries.

Deel has connectivity into Globepay using their API. Deel clients provide their credit and debit details within the Deel web application, Deel systems pass those credentials along with any relevant transaction details to Globepay for processing.

Problem

Deel is experiencing a decline in the acceptance rate of credit and debit card payments processed by Globepay in the recent period. The “acceptance rate” is defined as the number of accepted transactions divided by the total attempted transactions.

Relevant files:

- Acceptance report
- Chargeback report
- globepay_api.html

Task #1

Please present a report (presentation/keynote/pdf) that:

- outlines the volume (in USD) of the declined payments
- the problem root causes
- suggested solutions / recommendations
- list of further next steps (hypothesis / analysis) you would do as a next steps having more time and business knowledge

Task #2

Working on the same dataset, please provide SQL queries (python for data scientists) to answer the following questions:

- Acceptance rate over time
- List of countries where the amount of declined transactions went over \$25M
- Missing chargeback data

