

The Prompt

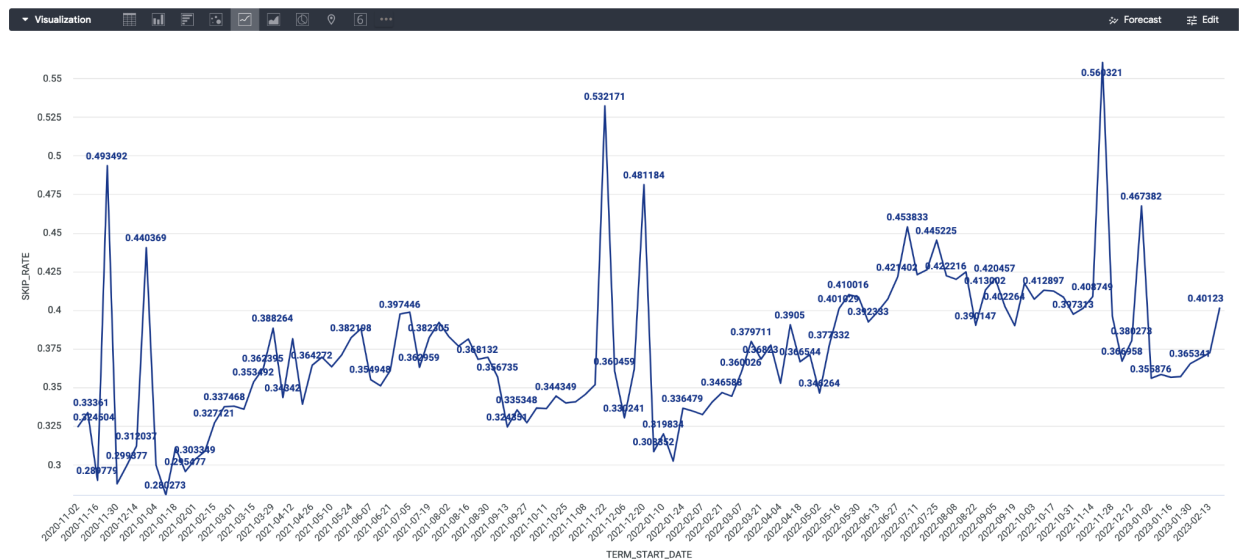
You are a Business Analyst on the Data Team at Tovala. You get this message from the CEO.

Hey!

I've got a call with some potential investors tonight. I've been looking at the skip rate KPI and can't seem to find a good explanation for why it's increasing y.o.y.

Could you please take a look and see if there's a "smoking gun" that explains the y.o.y. increase in skip rates? If so (or even if not, I guess) please make some data-backed recommendations on what we as a company might do to improve skip rate.

Here is the chart I'm referencing:



Here is the query I ran to create it:

```
with srs as (
  select
    term_start_date
    , count(distinct case when order_status = 'skipped' then
customer_term_id end) as skip_count // status on order was "skipped"
    , count(distinct case when subscription_status = 'active' then
customer_term_id end) as active_count // status on account was "active"
    , skip_count / active_count as skip_rate
  from interview.customer_term_summary
  group by 1
)
select term_start_date, skip_rate
from srs
order by 1
```

I'm looking for an answer in the next 3-4 hours if possible. Thanks!!!

CONFIDENTIAL: Do Not Share.

Background Information

For the purposes of this exercise, you have been provided with a sandbox environment loaded with 3 tables:

Customer Term Summary

Each row of data represents what a particular “customer” (Tovala subscriber) did during a particular “term” (week of business at Tovala).

Put differently, whether a customer ordered, skipped, canceled, etc. in a given week.

[Data Dictionary](#)

Customer Facts

Each row of data represents demographic, psychographic, and account level information about a customer.

[Data Dictionary](#)

Oven Orders

Each row of data represents a customer’s first Tovala oven purchase.

[Data Dictionary](#)

Credentials

URL to access data: <https://maestrofood.cloud.looker.com/sql?toggle=dat.sql>

Email: data_candidate@tovala.com

Password: rsya69UydTVdGC9!

Submission Instructions

Submit your response to mo@tovala.com

Provide a concise write-up which:

- Includes a separate, concise executive summary.
- Contains an explicit set of recommendations for how the business can reduce skip rates.
- Summarizes the methodology and results of your root-cause analysis.
- Includes pertinent visuals, calculation outputs, and takeaways.

Please also send any queries, code (Python, R, etc.), spreadsheets, notes etc. you used to arrive at a set of recommendations. We care about your thought process as much as (if not more than) your results and recommendations.

Note: The data you’ve been provided is structurally representative of the data Tovala captures and uses for analytics. However, the specific dataset has been manipulated for the purposes of this exercise. As such, these data may not be representative of actual performance trends / customer make-up at Tovala. Also, no PII - because we’re not gremlins.