

Alternative shipping plans

Company named Grobal is known for selling high-end products from many different categories. Currently they are testing two alternative shipping plans: "Shipping A" and "Shipping B". Since they are completely different, it's quite hard to decide which option should be used.

For the last few years, the company used both options interchangeably. Now they want to decide if they should stick only to one of them.

Your task

Prepare an analysis that will verify the relationship between both shipping plans? You can use following questions as a suggestion what to investigate:

- Is one shipping always better than the other?
- Are there any categories where one option can be more useful than the other?
- Are the differences visible in all years?
- Can you estimate confidence intervals for your decision?
- Are there any sellers that should use the only one shipping option?

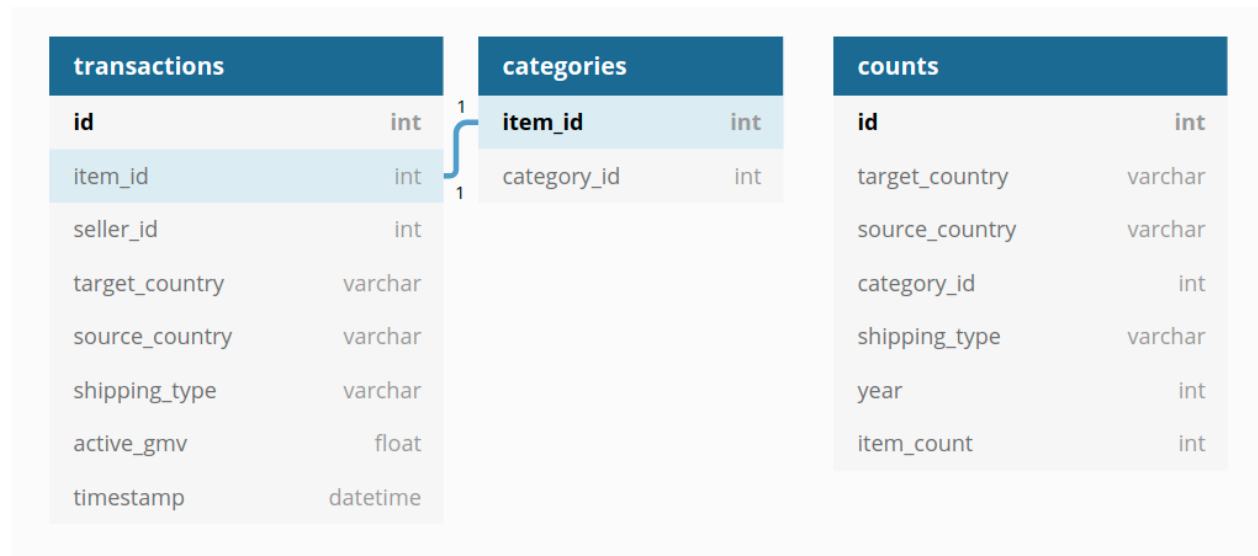
Data

You can download the dataset from following link:

<https://drive.google.com/file/d/1fO4bzSO3fJnli3abuOwCk2TjB1U7XTKB>

The dataset is shared in a sqlite3 database with a following data structure:
(see the next page)

Database structure



Data dictionary

item_id	Unique id of an item
category_id	Unique id representing a category of an item
seller_id	Unique id of a seller
target_country	Country where the item was shipped
source_country	Country from where the item was shipped
active_gmv	The amount that was paid (without the shipping cost)
timestamp	Timestamp when transaction was created
item_count	The total number of items available for this configuration of (target_country, source_country, category_id, shipping_type) in a certain year