# Introduction

The main goal of this project was to create a visualization to report make a report to the sales and customer experience teams.

# Dashboard

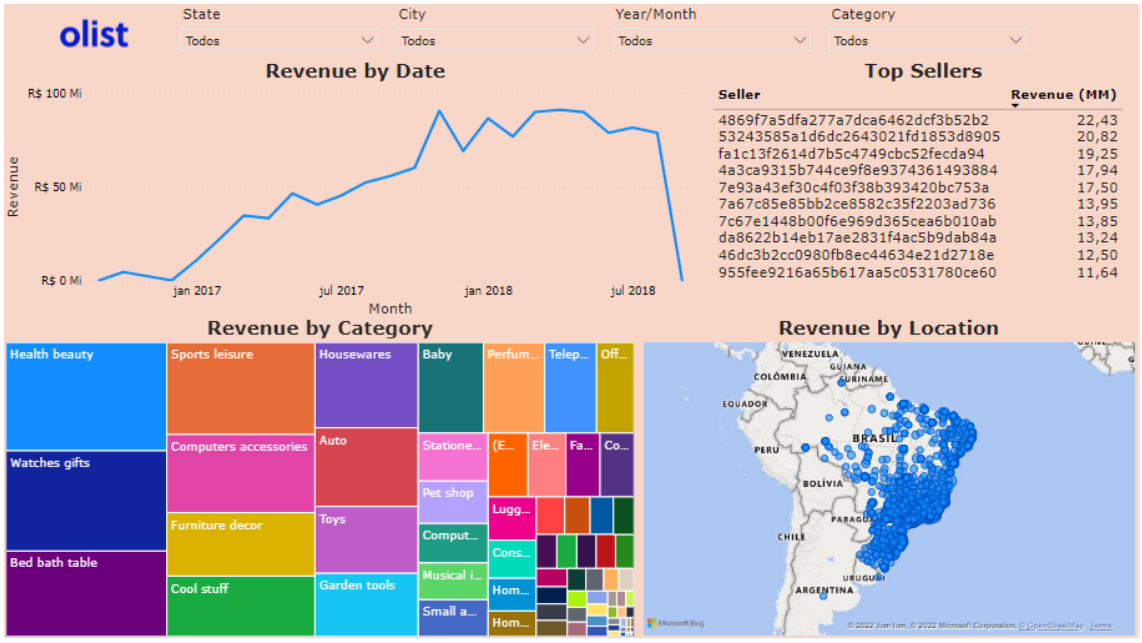
The dashboard was divided into two pages. The first was related to the sales and the second to the customer experience

## Sales Report

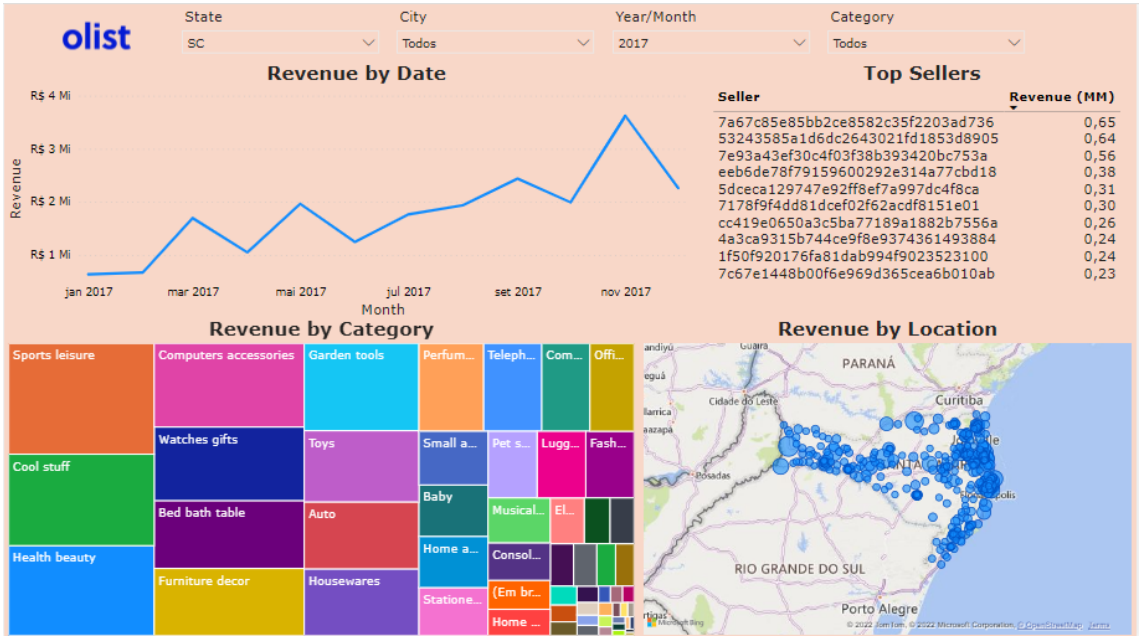
In this first dashboard, it is displayed the revenue by period, the top sellers, the top categories and the revenue by location.

The dashboard also supports filters. These filters are Geolocation, Year/Month and Category (e.g. Toys, Watches and Pet shop)

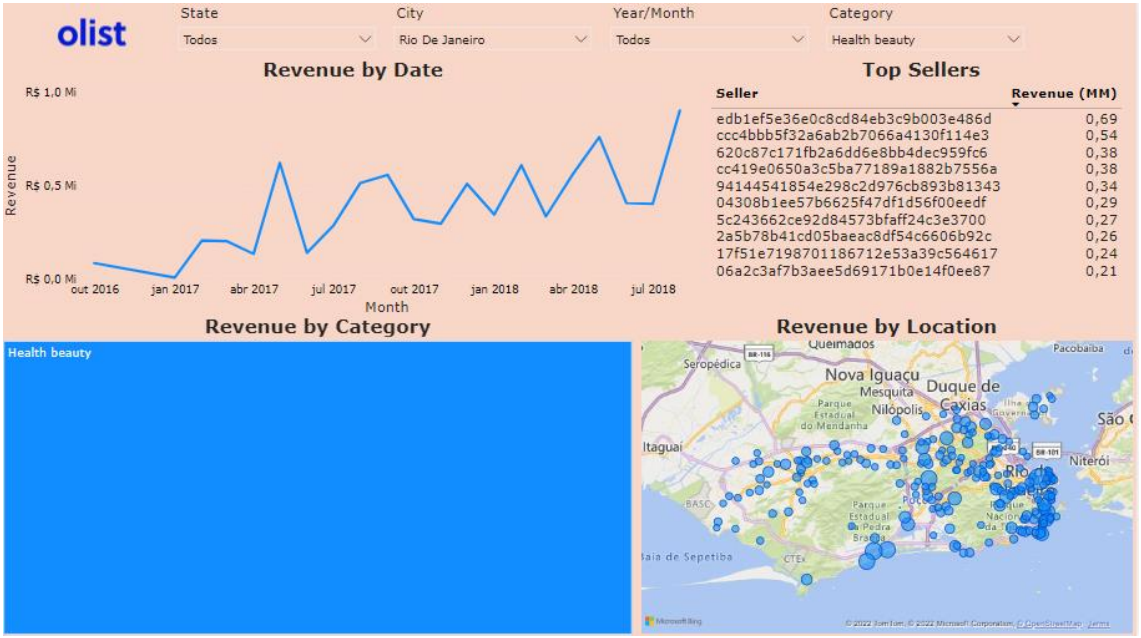
Let's take a look at the dashboard:



We can see how was the sales in the state of Santa Catarina in 2017.

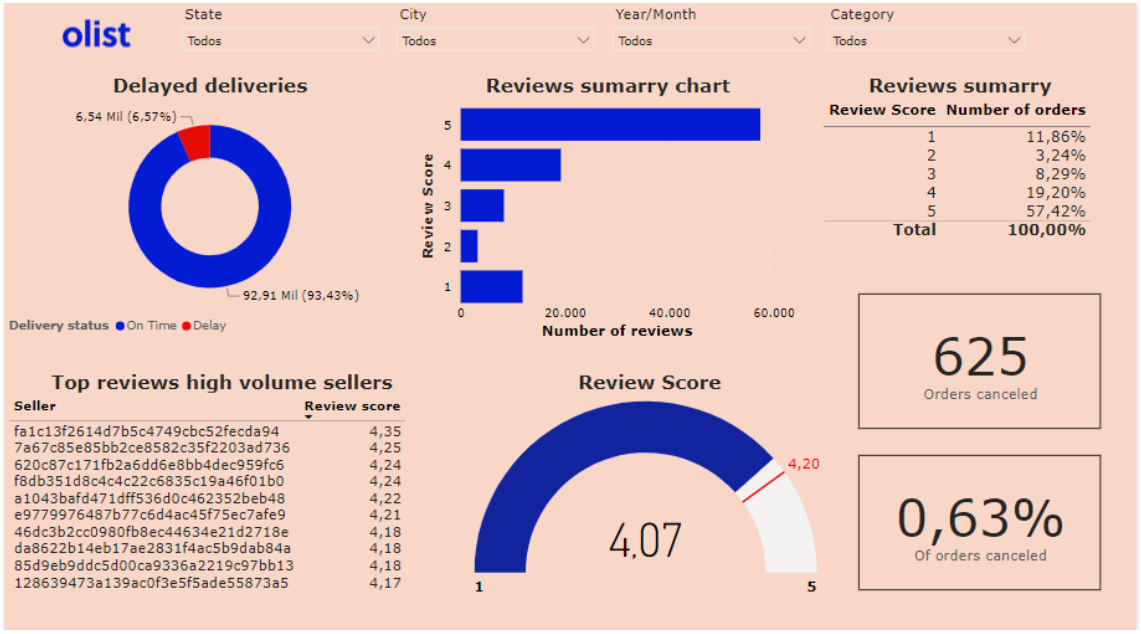



Now let's see the sales of Health and Beaty products in Rio de Janeiro.



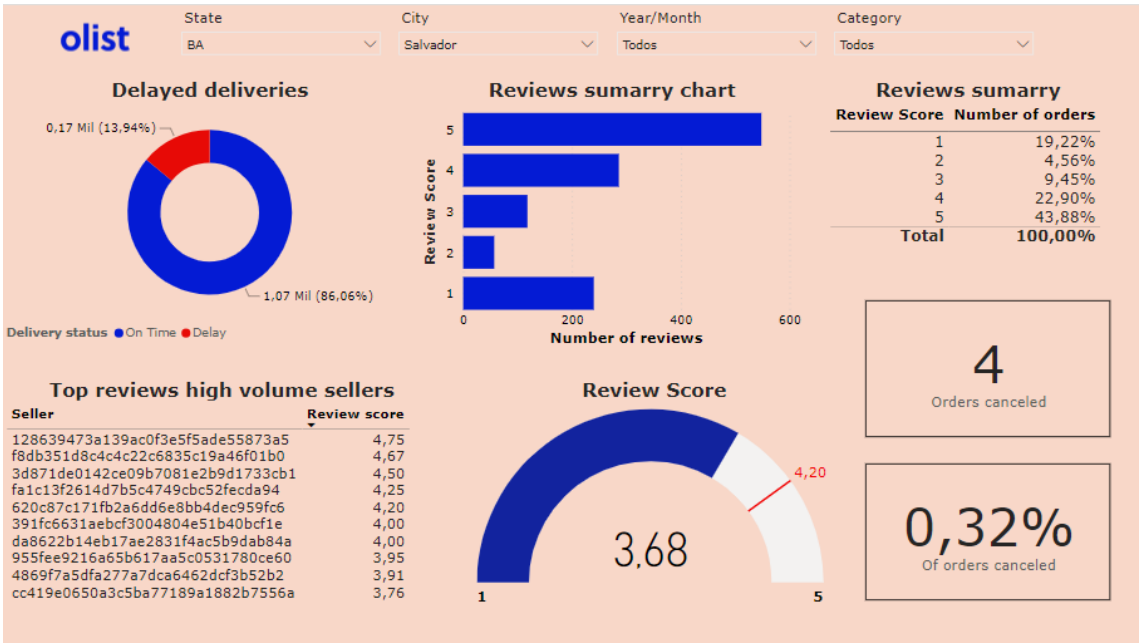

## Quality Report

This page is related to the experience of the client. That means the page reports the number of delayed deliveries, the review score, how many orders were canceled and the sellers with the highest score (only the sellers who sold more than 500 items).

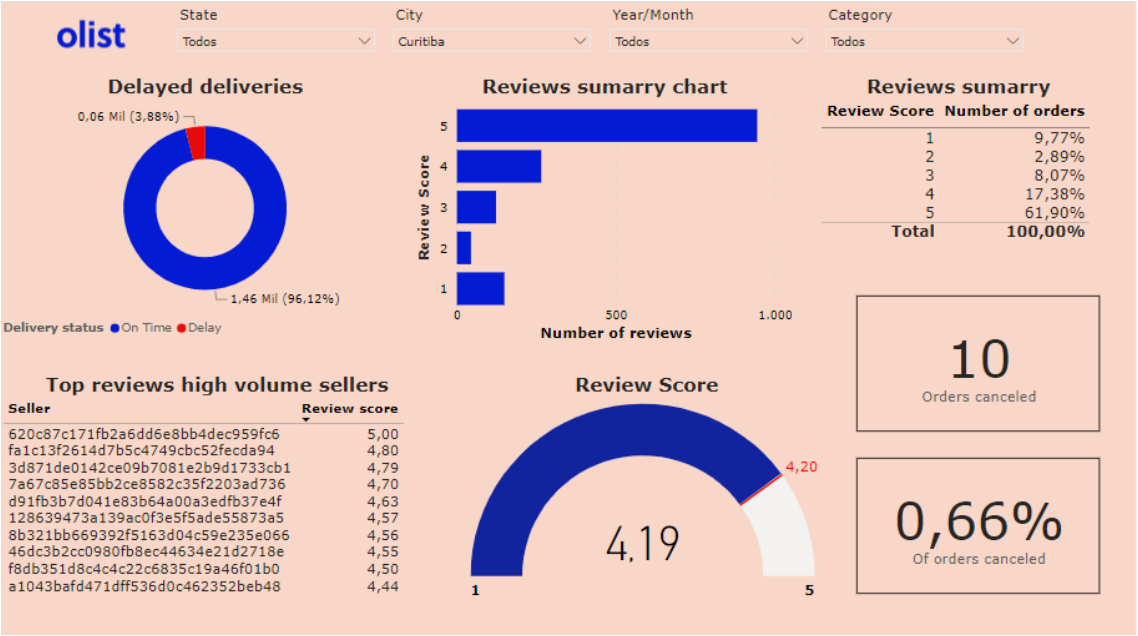



The red number In the Review Score session is the target.

Let’s the metrics in Salvador.

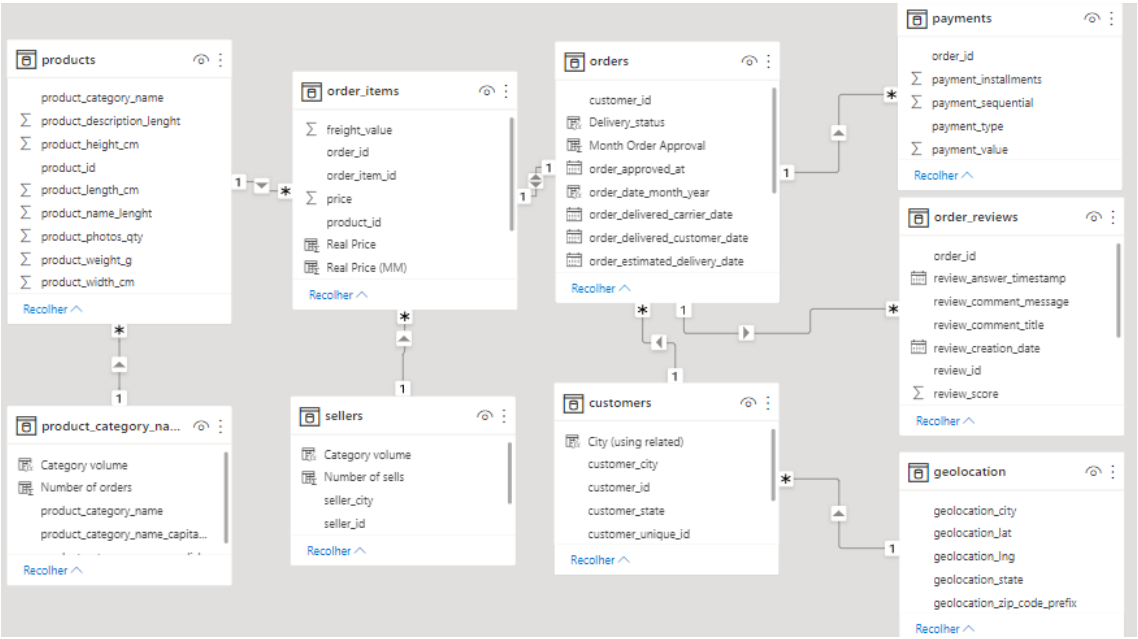


What about Curitiba?




## Data Modeling

The data was connect using this model:




Unfortunately, to fit all tables in the image, the model is disorganized. The orders table is the fact table and the orders are the dimension tables.

## DAX

To make the analysis better, some new columns were created using DAX.

Here are some examples.

To classify the order as delayed or on time:

```
Delivery_status =
IF(orders[order_delivered_customer_date]>orders[order_estimated_delivery_date],"Delay
","On Time")
```

To classify the seller was low, medium or high volume:

```
Category volume =
SWITCH(TRUE(),
        sellers[Number of sells] >= 500, "High Volume",
        sellers[Number of sells] >= 100, "Medium Volume",
        sellers[Number of sells] >= 1, "Low Volume",
        "NA")
```

Also, some measures were created. Here are some examples:

To calculate the number of sells:

```
Number of sells = COUNTROWS(RELATEDTABLE(orders))
```

To calculate the average review score only to the high volume sellers:

```
Review Average (High Volume) =
CALCULATE(
    order_reviews[Review Average],
    sellers[Category volume] =  "High Volume")
```

To calculate how many orders were canceled:

```
Count Canceled =
IF(CALCULATE(COUNTROWS(orders),orders[order_status]="canceled")=0,0,CALCULATE(COUNTRO
WS(orders),orders[order_status]="canceled"))
```

## Conclusion

The idea behind the project was to create a simple visualization that anyone with no technical background would understand. Power BI proved to be an excellent tool for analysis.

This project was an excellent tool to learn more about data visualization tools. In this experience, the student could learn more about DAX, measures, data modelling and how to create a nice dashboard.

The *pbix* archive can be found at the Github repository.