## **Seazone Challenge**

#### **Junior Data Scientist**

### Problems Tackled

One of the difficulties I had was understanding the logic of reservations and what their revenue looks like. After working and reading a few times, I can assimilate better.

As soon as I imported the file, I built all the dashboards and realized that the values were too high. After analyzing it for a while, I noticed that, in the treatment of data in Power BI, the decimal numbers were being converted into integers due to the "." in separating decimals. After a quick correction, the values normalized.

The second question I had a certain doubt on how to calculate future revenue. At first I was a little in doubt, but when analyzing all the years, I noticed that the columns "revenue" and "last offered prices" were identical. So I bound the logic and since there was no revenue posted yet for the later dates, I used the "last offered price" column to use as the base value. In addition, I remembered the rule described in the text and for that reason I added a filter to complete the analysis. A good way to analyze this data would be publishing the files later through the Power BI gateway on a secure server with the proper credentials for access.

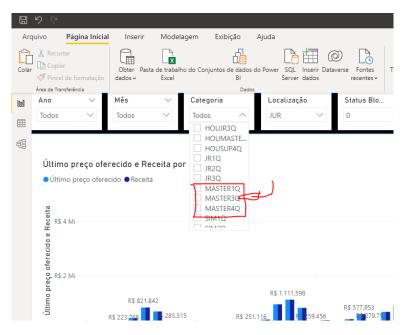
## • <u>Code Improvements</u>

- Make a fixed filter containing the mandatory rules in the very logic of the measures created to avoid future mistakes in future analyses.
- Improve the structure of the user being able to navigate and being able to extract a specific part of your report, that is, in the creation of menus and a more pleasant frontend.
- Improve data handling in order to obtain only what is necessary, disregarding any unnecessary data.

### Data analysis

## - What is the expected price and revenue for a listing tagged as JUR MASTER 2Q in march?

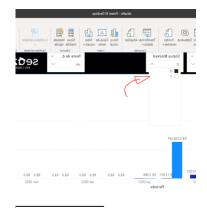
No bid records were recorded for the JUR MASTER 2Q listing.



No recorded for JURMASTER 2Q

### - What is Seazone's expected revenue for 2022? Why?

The expected revenue until the end of 2022 is R\$ 19.246.034, because according to the records found, the values found in the "last\_offered\_price" column are the same as those found in the "revenue" column. Only for future releases that these values are different, considering only the values that are not blocked (Column "block" = 0). Based on that, the sum of the records results in the value previously informed.

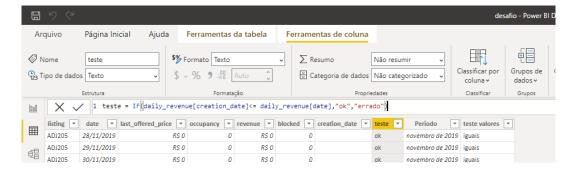




R\$ 17 78/ 25/

Condition without being blocked

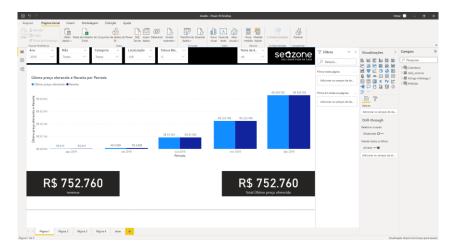
Test to see if the date rules are being respected



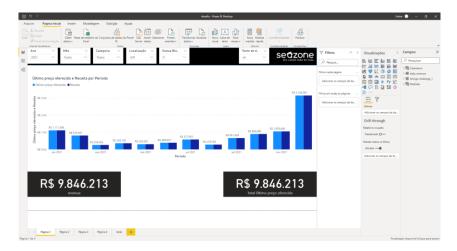
Formula for date test



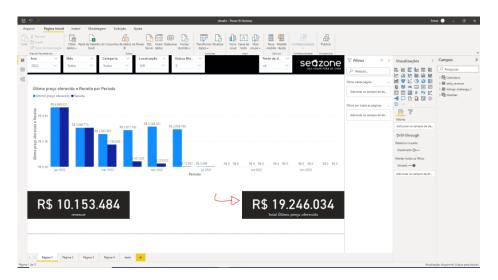
Compared to other years pt.1



Compared to other years pt.2



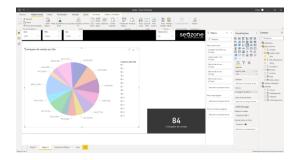
Compared to other years pt.3



Expected revenue for 2022

### - How many reservations should we expect to sell per day? Why?

Based on the period 03/2022, the day with the lowest sales was 84 and the highest was 890, with an average of approximately 479 daily sales in this period.





Shortest day of sales

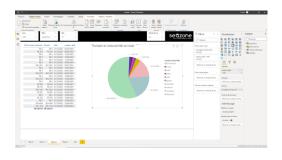
Biggest day of sales

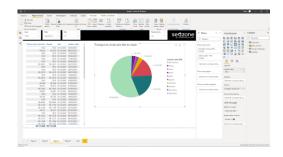


Sales count by day of march

# - At what time of the year should we expect to have sold 10% of our new year's nights? And 50%? And 80%?

Based on the year 2021, in the months of: March, May, June, August and September, about 8.86% of New Year's nights were sold. Until the month of November, about 43%, and in December it totals the rest of the New Year's sales.





To 10% To 50%



80% or +

## - How can this information be useful for pricing our listings?

Because according to the periods in which there was high demand for reservations, prices may increase when closer to these dates with greater travel frequency.