The analysis of the coronavirus pandemic impact on travel agencies.

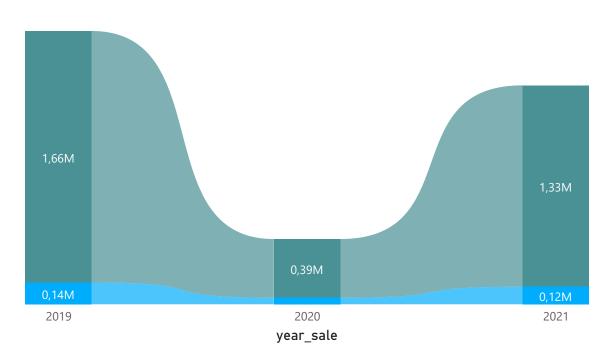
In this project, I am going to analyze the coronavirus pandemic impact on travel agencies and the travel industry. One travel agency provides me with data on their sales during the so-called high season from 01.03 until 31.08 for three years - 2019, 2020, 2021. I am allowed to work with the date of sale, its total price in USD for tourists, and the total travel agency's commission in USD. Meanwhile, the name of the travel agency and its location will remain unknown due to the privacy policy of the company. Let's compare the data for each year and make a conclusion on how travel agencies and the potential customers had changed.

Year	Month	tour_price_usd	commission_usd
2019	March	42,04	42,02
2019	March	45,54	42,74
2019	March	55,74	37,79
2019	March	56,05	42,04
2019	March	84,07	73,73
2019	March	155,69	141,52
2019	March	163,48	32,70
2019	March	174,37	16,32
2019	March	194,61	58,15
2019	March	201,15	42,35
2019	March	339,41	33,68
2019	March	448,39	41,76
2019	March	448,39	45,13
2019	March	457,73	89,52
2019	March	537,13	52,45
2019	March	538,69	52,76
2019	March	548,03	83,82
2019	March	553,57	40,88
2019	March	586,95	55,71
2019	March	695,16	667,14
2019	March	700,61	58,21
2019	March	705,12	695,31
2019	March	775,34	63,84
2019	March	776,12	763,68
2019	March	790,91	170,04
2019	March	822,05	74,11

Let's take a look at all data that we are going to work with. We will analyze 1997 sales. It is going to be entertaining. So let's begin shaping the data.

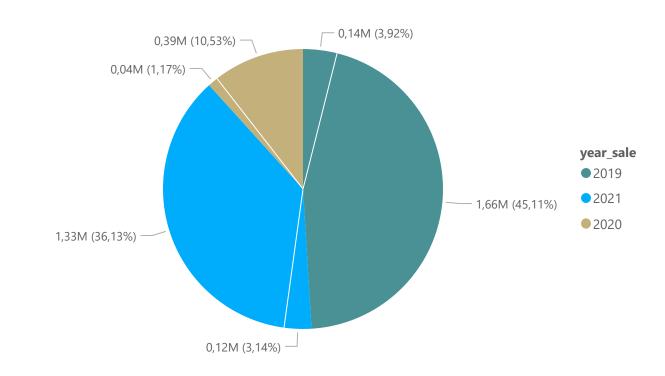
sum_price and sum_comission by year_sale

sum_price sum_comission

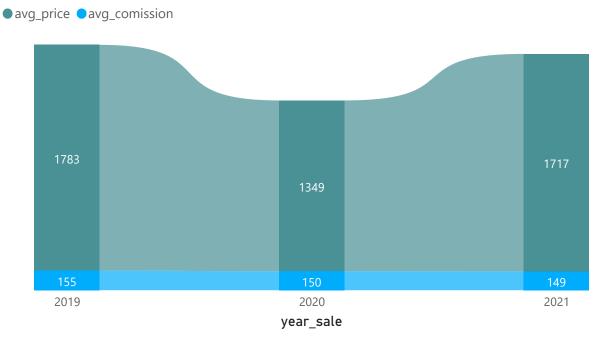


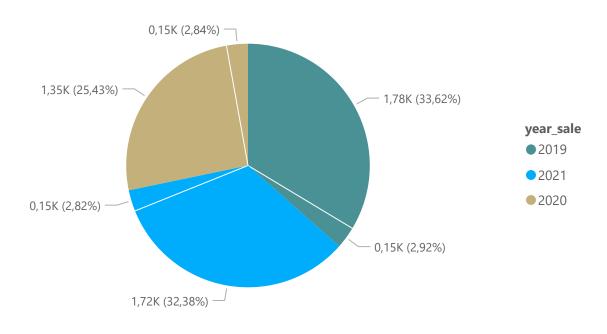
Let's take a look at the same data from different sides on different graphs. On SQL query we can see the sum and average of the total tour's price and agency's commission according to each year. In addition to that, we can see the total number of sales that were made every year. Firstly, let's focus on the sum of total prices and commissions on our graphs. As it is shown, the total price of all tours in 2019 was almost the same as the sum of 2020 and 2021. We can say the same while comparing the sum of commissions for each year. In 2019 commission was 47.56% from all data. However, we can get some advanced information after comparing average showings and numbers of sales.

sum_comission and sum_price by year_sale



```
SELECT YEAR(sale_date) AS year_sale, SUM(tour_price_usd) AS sum_price,
1 •
                SUM(comission usd) AS sum comission, AVG(tour price usd) AS avg price,
                AVG(comission usd) AS avg comission, COUNT(1) AS sales number
       FROM dwh.sales total
       GROUP BY YEAR(sale_date);
             Filter Rows:
                                            Export: Wrap Cell Content: $\overline{A}$
sult Grid
 year sale
                                      avg_price
                                                                  sales_number
           sum price
                        sum_comission
                                                    avg_comission
                                                                 933
2019
           1663810.40
                       144406.86
                                      1783, 290890
                                                   154.776913
2020
           388422.67
                       43304.48
                                      1348.689826
                                                                 288
                                                   150.362778
2021
           1332526.71
                       115892.47
                                      1717.173595
                                                   149.345966
                                                                 776
```





During previous comparisons, we saw that the sum of total tour prices in 2019 was more than 4 times higher than prices in 2020. Meanwhile, the sum of commissions becomes nearly 3 times smaller in 2020. Nonetheless, in 2021 these indicators were much closer to 2019, rather than to 2020. But what can we say about average values? The average commission for every year is almost the same. Moreover, in 2020 it is even a bit higher than in 2021. Although the average commission remained almost still, the average tour price in 2020 had decreased by approximately 25%. If to speak first about the number of sales in 2020 they were decreased by 3.2 times, but in 2021 they were increased by 2.7 times. What can we say in conclusion after reviewing all this data? We can be sure that the average commission almost remained still. On the other hand, the average tour price had appreciable changes, but in 2021 had almost reached the level of 2019. To sum up, we can say that despite the heavy impact of coronavirus and crysis in 2019, this travel agent had almost achieved the level of the 2019 year. Agency's operations during 2020-2021 had positively influenced on recovery of price and commission, but there was a decrease in the number of sales. That is why the main task in the business strategy for this agency in 2021 was expanding new audiences and involving new customers. If to speak about customers behavior, we can see that in 2021 they were buying travel services almost as well as in 2019 before coronavirus, but purchasing power had decreased, so nearly 17% of customers had cut off.