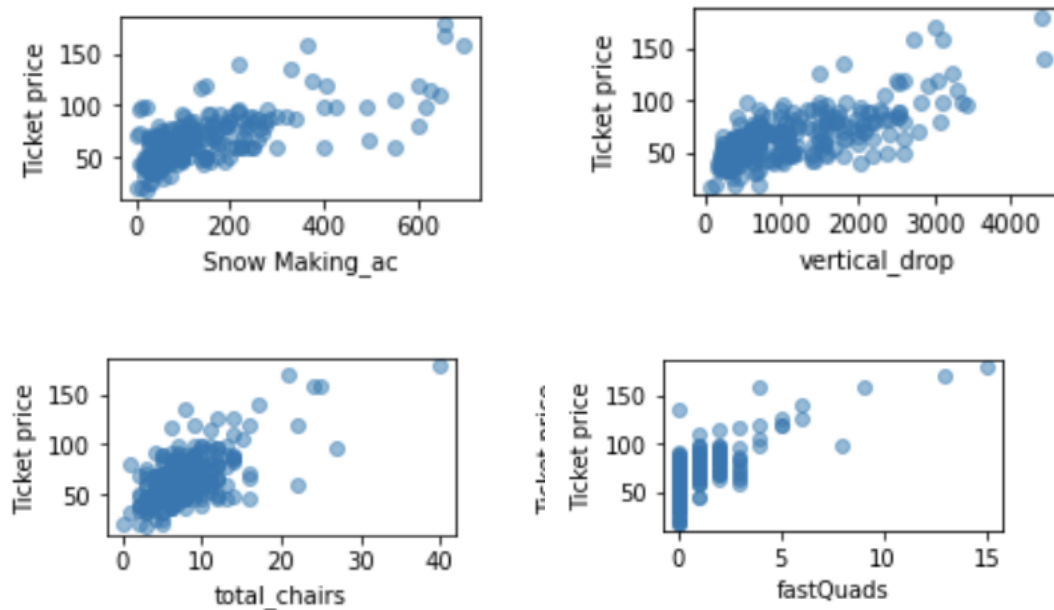


Big Mountain Resort has been pricing their resort tickets at a premium above the average price for a long time, and the prices for both weekdays and weekends are both \$81.00. Compared with the rest of the resorts in Montana alone, we know that Big Mountain Resort has the highest ticket price in Montana, which could be reflected in the fact that Big Mountain has more equipment and better features than these other resorts in Montana. However, the price itself does not reflect the fact that Big Mountain Resort has and operates under an environment with a lot of features that could be used to support a better ticket price. In other words, we believe that Big Mountain Resort could potentially establish a higher ticket price than current ticket prices, generate more revenues in the future, and support even higher prices than projected with some other updates on its facilities.

The reason why we stated that Big Mountain Resort should raise the ticket price to generate more revenue is that the resort itself has several features that would contribute to making the resort more attractive, and consequently more expensive, to the customers.



I included two features that would drive up prices to a certain extent, and Big Mountain Resort does appear to be in a position that retains high numbers for some of these features. Then, from our exploration with our data, we have created a Random Forest regression model to help us calculate a price that Big Mountain Resort could support with its amazing features. From our model, we found that Big Mountain Resort could have a ticket price of \$95.87. Just to be clear, we are not saying that 95.87 is the exact price that Big Mountain Resort needs to set to generate more revenue. However, with a mean absolute error of \$10.39, it seems like the current price of 81 dollars is below any price that could be expected from a resort like Big Mountain with such abundant features.

Moreover, from our simulation of trying to adjust the quantity of certain features, we have noticed that by having an extra run, an increased vertical drop of 150 feet and an additional chair lift (on the basis each visitor on average buys 5 day tickets), the resort could support an increase of price of 1.99 dollars, which equates to roughly 3.4M dollars in revenue increase. In the future, if Big Mountain Resort were to make changes to support a better ticket price, increasing the number of runs, vertical drop, and total chairs seem to be enough to generate revenues, compared to some other features which might not lead to any higher support for prices.

In the end, I would like to say that Big Mountain Resort has been operating on the ticket price of 81 dollars, and I describe this period as the past. Big Mountain Resort is certainly capable of supporting a higher ticket price, and the resort deserves a lift in ticket prices to generate more revenue and attract more investment opportunities. A better ticket price, like ninety five point eight seven dollars, would certainly be supported by the resources of Big Mountain Resort, and the subsequent raise in ticket prices would directly lead to massive profits.