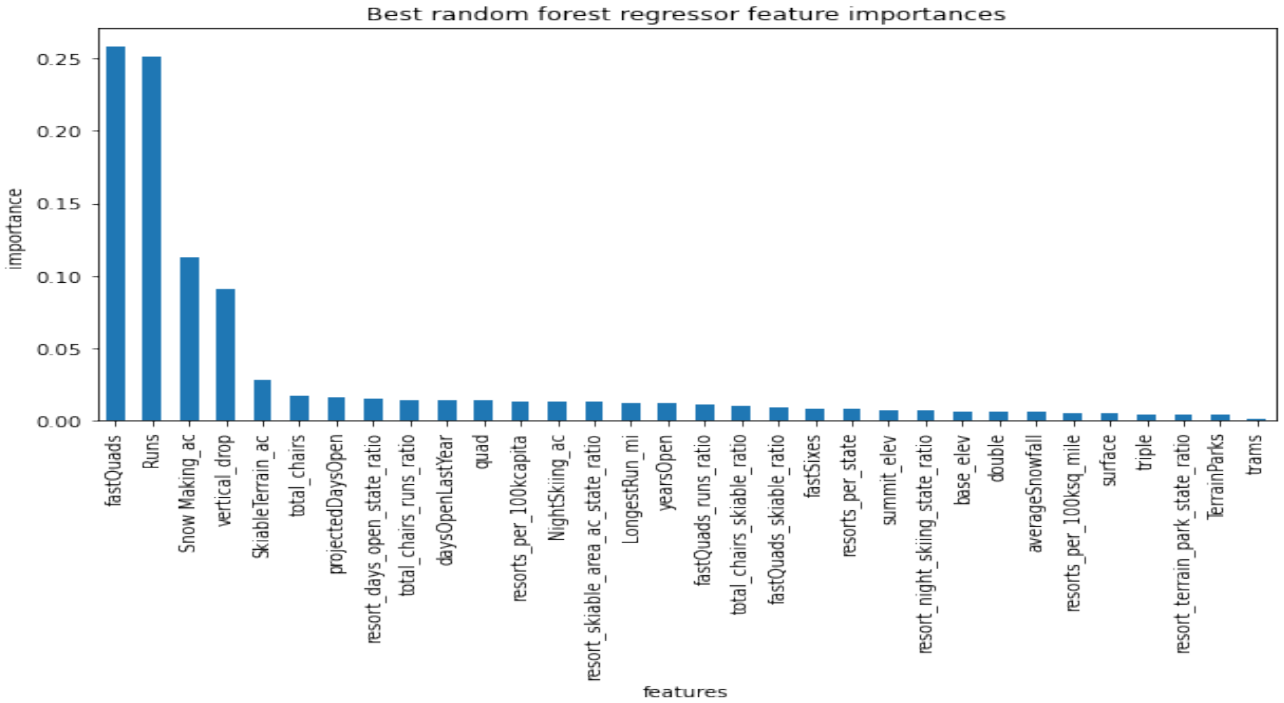
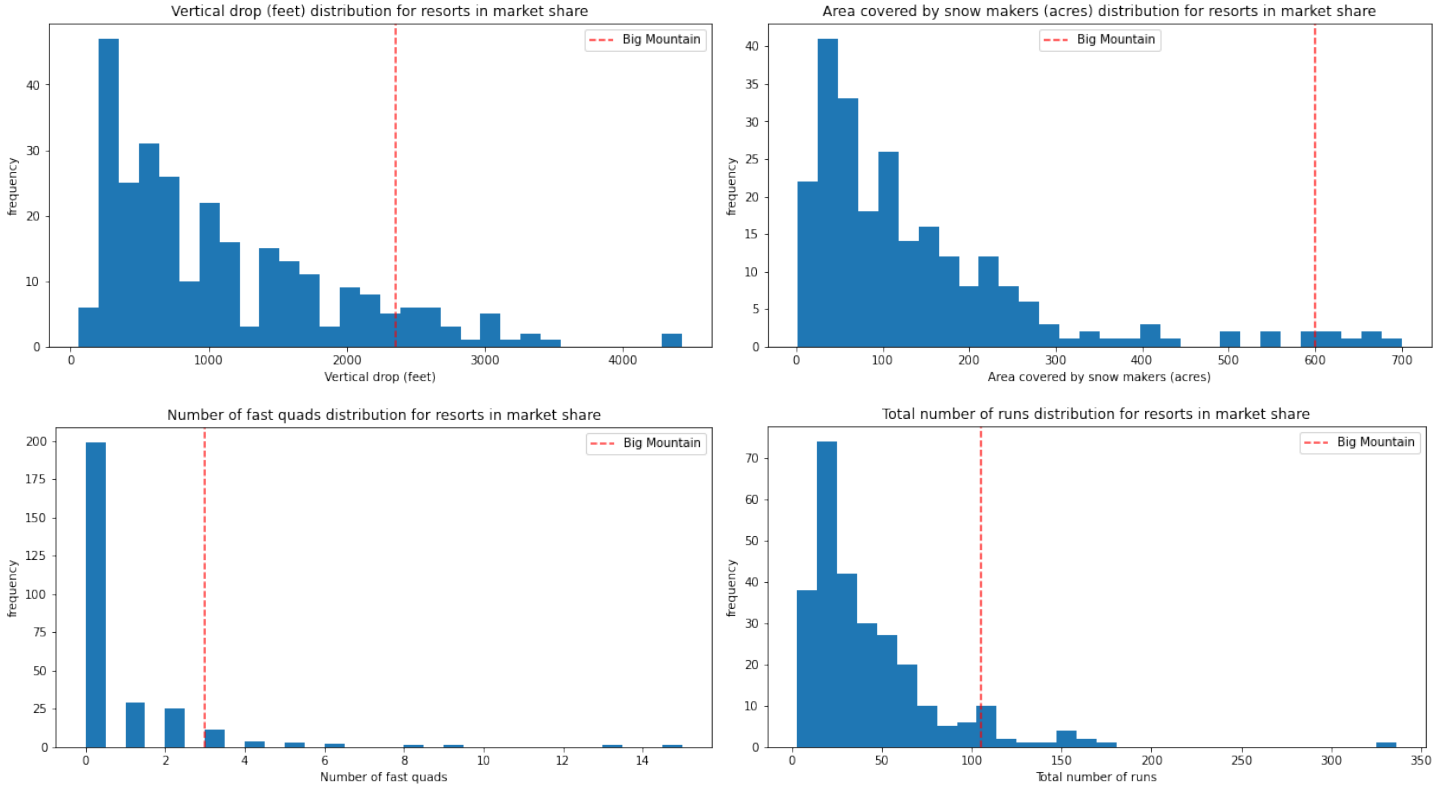
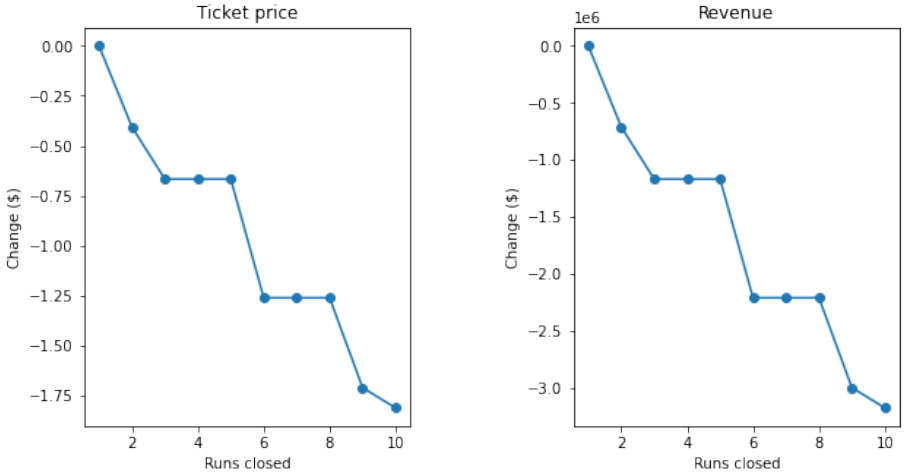
Big Mountain Resort needs to come up with $1,540,000 to pay for operational costs associated with the newest chair lift. Our pricing system is outdated. Currently lift ticket price is based on an average of our competition without regard to resort features. Using a data frame containing ski resort data, we have identified key features with stronger correlation to ticket price.



Fast quad chair lifts, number of available runs, amount of snow making a resort does, and the vertical drop have proven to be the most important features. Big Mountain performs well in these areas. Big Mountain Resort currently charges $81. Our modeling suggests that an increase in ticket price is justified. The model suggested price is $95.87 with a mean absolute error of $10.39. The important price setting features of Big Mountain were compared in histograms.

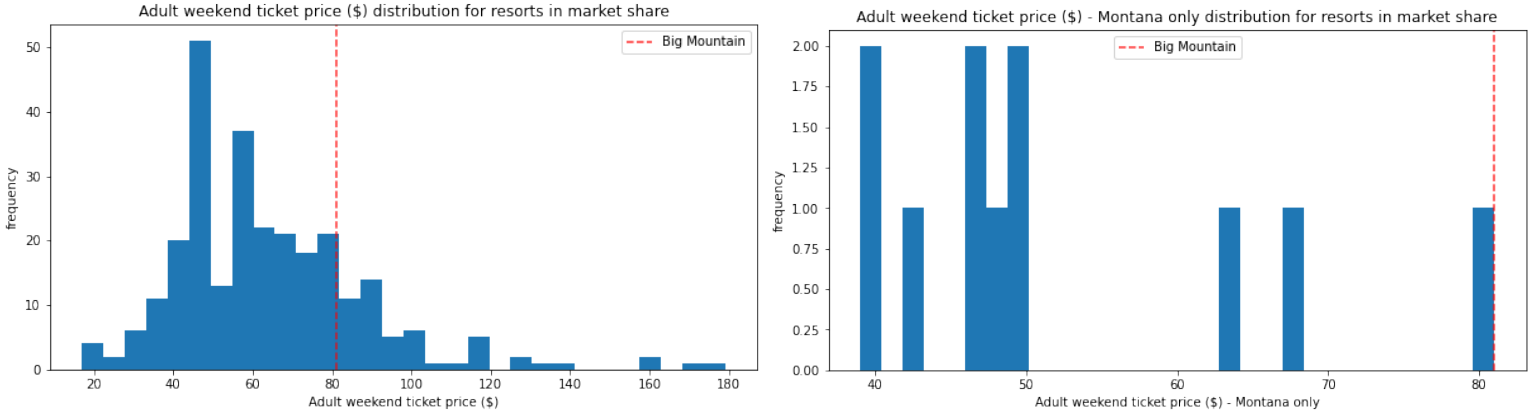


Limiting expenses is another way to help make up the $1,540,000. Permanently closing down our least used runs in order to limit operation costs. With our model, closing down 1 run would have no negative impact on ticket price, while closing up to 5 would have minimal impact, losing 66¢ of precieved value ($1.155M in revenue).



We should explore how much operation expenses are used maintaining these runs. From the graph above Big Mountain has a favorable number of runs. But everyone likes more runs. Can we add a run and remove/edit some runs? We would like to introduce you to our suggestion, scenario 2. Scenario two consists of adding or modifying an unused run that would increase vertical drop of the resort by 150ft. Construction of another lift/tow rope would be necessary as this run would send guests below our base elevation. Our model predicts this would support increasing ticket price by $1.99 which would amount to $3,474,638 over the season. Our model also supports increasing vertical drop by as much as possible. If we were able to complete scenario 2 yet by increasing the vertical drop by 250ft we can see a $4.54 increase and $7,938,659 over the season. Constraints would be construction costs and is land available for this? Expanding the resort is not correlated with increased price, what kind of new features the new land could be is.

Based on expected annual resort guests being 350,000, and each guest skiing an average of 5 days every $1 increase in price will generate $1.75million in revenue. At $81 our expected revenue is $141,750,000.



As ski executive you'll notice our model shows us as the most expensive resort in Montana yet you know this to not be true. Big Sky was among those removed from the sample based on missing data points. Their current listed ticket price is $194. More than double our current price. Based on our modeling we suggest $98 to be our new ticket price which would bring our revenue to $171,500,000. Almost $30M higher. As is. Should we go with some version of scenario 2 our ticket price could easily become $105, $183,750,000. $42M higher. Even with our current resort features and our model excluding several higher priced resorts $105 is within the mean absolute error.