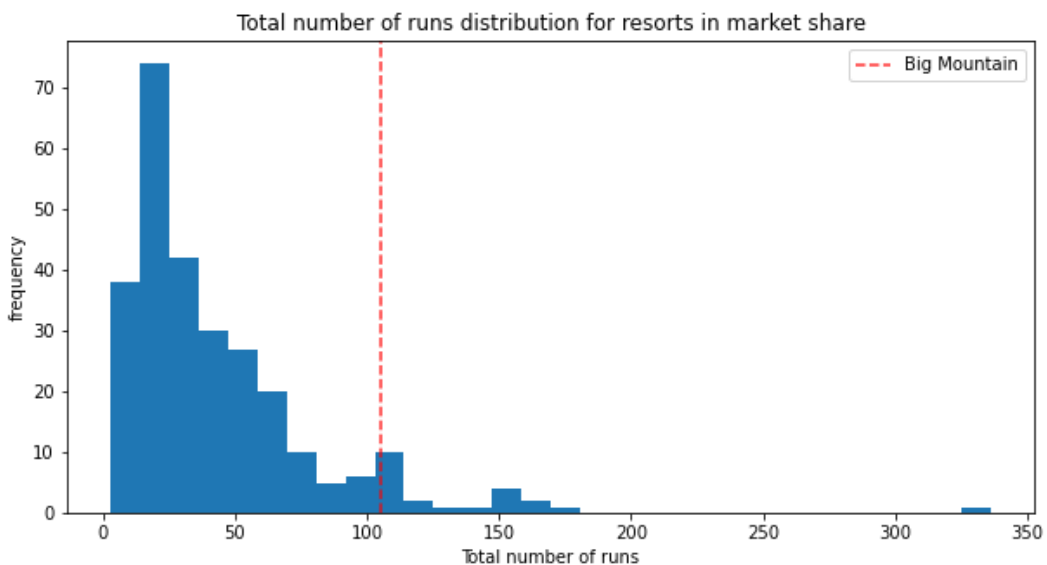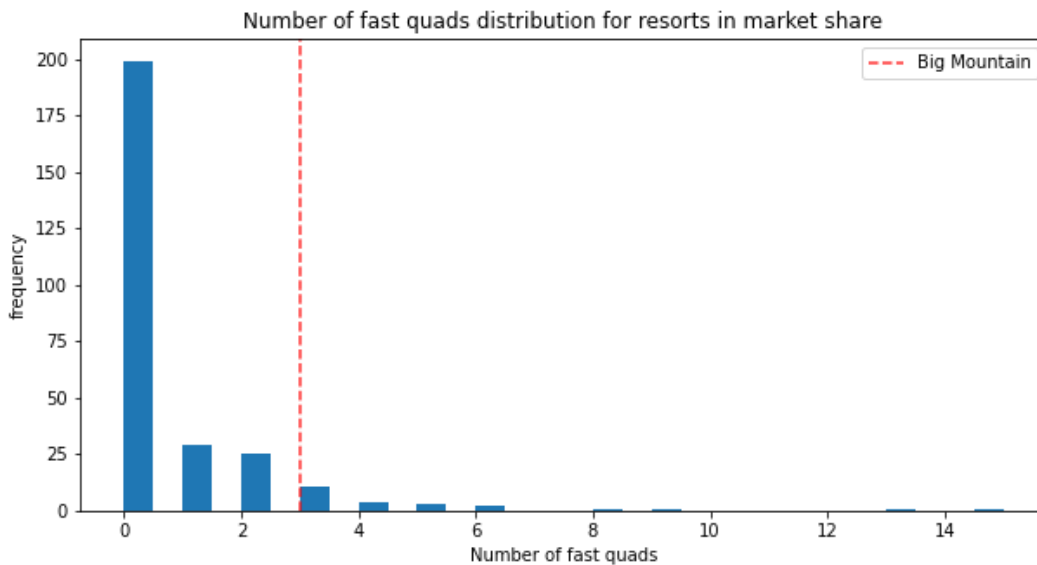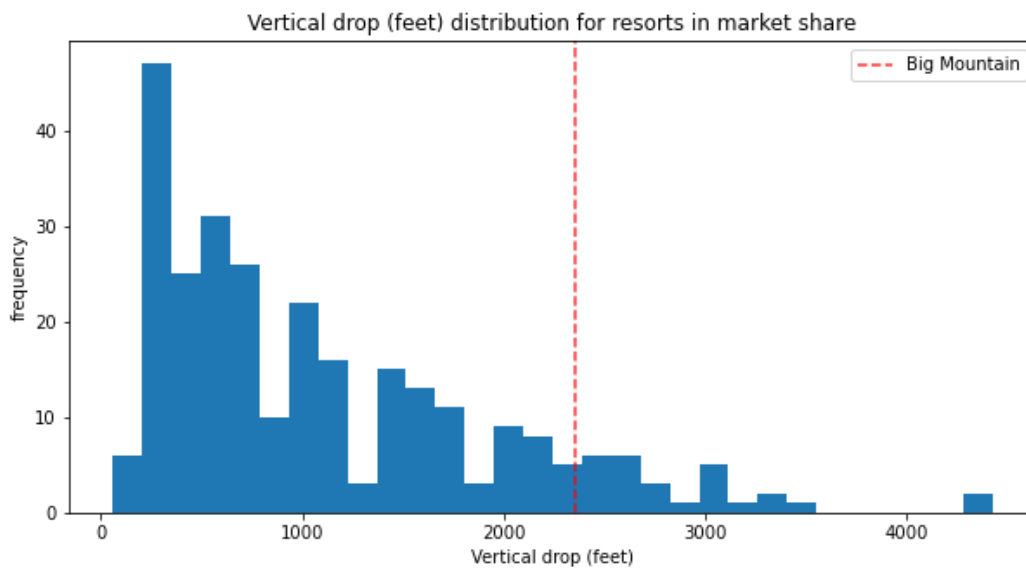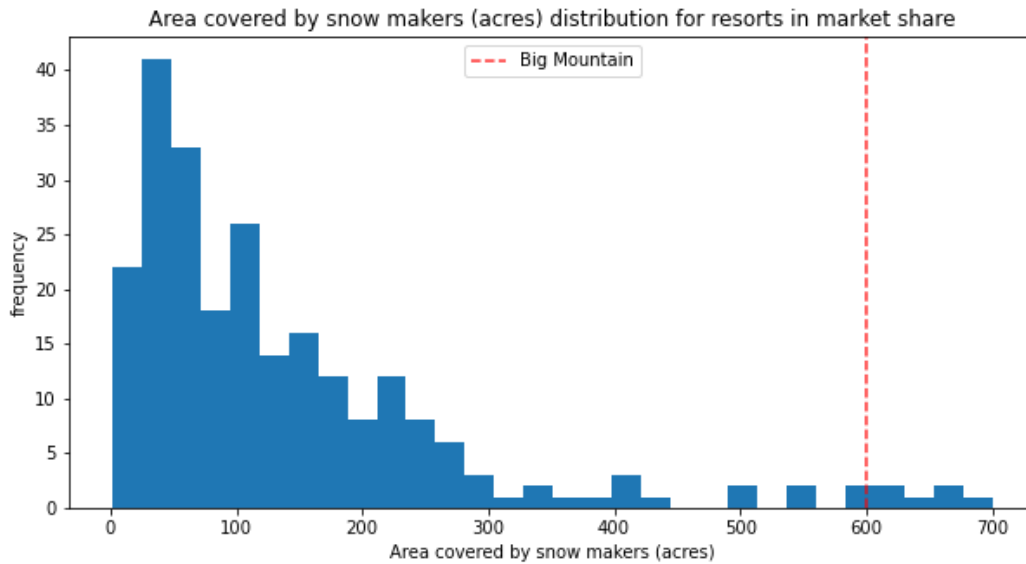# Report on recommendations for Big Mountain Resort

We investigated several options for increasing the profit for Big Mountain Resort. We find that the number of fast four person chairs(fastQuads), the number of runs, total area covered by the snow making machine and the vertical change in elevation from summit to base have the most influence on the ticket price. Big Mountain is already fairly high on the league chart for these facilities, so adding new facilities is unlikely to result in a significant increase in profit.

Area covered by snow makers (acres) distribution for resorts in market share

Vertical drop (feet) distribution for resorts in market share

We evaluated several proposed solutions. First, we evaluated the option of adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift, our model suggests an increase by $1.08 in ticket price. But when we take additional operating cost into account, this may not result in a significant increase in net profit. We also considered adding a run, increasing the vertical drop by 150 feet, installing an additional chair lift and adding 2 acres of snow making. The result from our model is similar to the previous one, with more operating cost, so this is not a good option. We also considered increasing the longest run by .2 miles and guaranteeing its snow coverage by adding 4 acres of snow making capability. Our model suggests this won't increase the ticket price either. Our last option is to close up to 10 of the least used runs. Our model suggests that doing this will reduce the ticket price, but if we take

the reduce in operating cost into account, then this can result in an increase in net profit, especially if we do not close more than 5 runs.
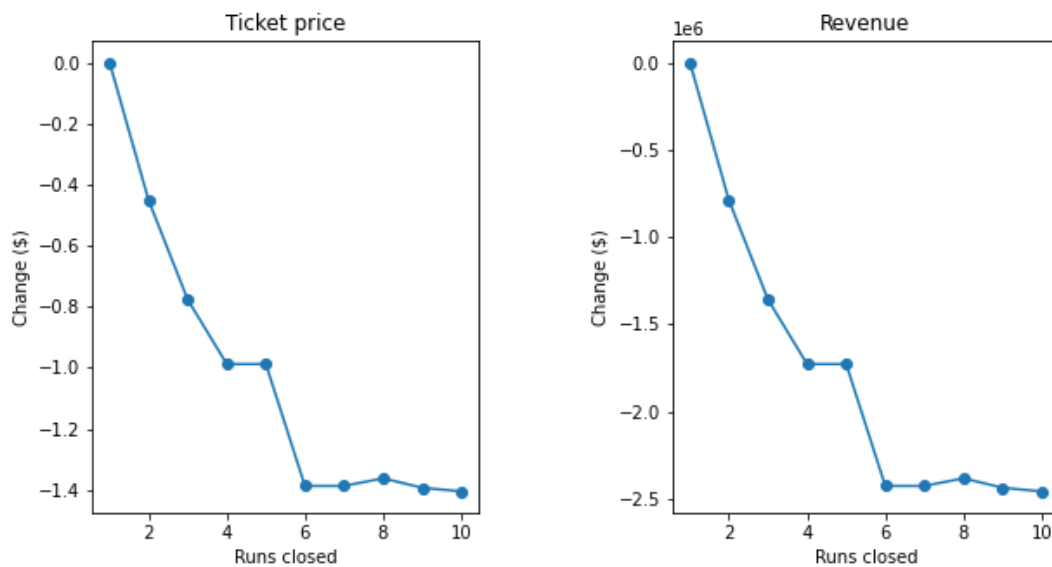
So our suggestion is to gradually close up to five the least used runs while fixing the ticket price. Each time we close a run, we can wait for sometime to evaluate people's response. If we see an increase in net profit, then we can consider closing more runs.