

Guided Capstone Project Resort - Big Mountain Ski Resort

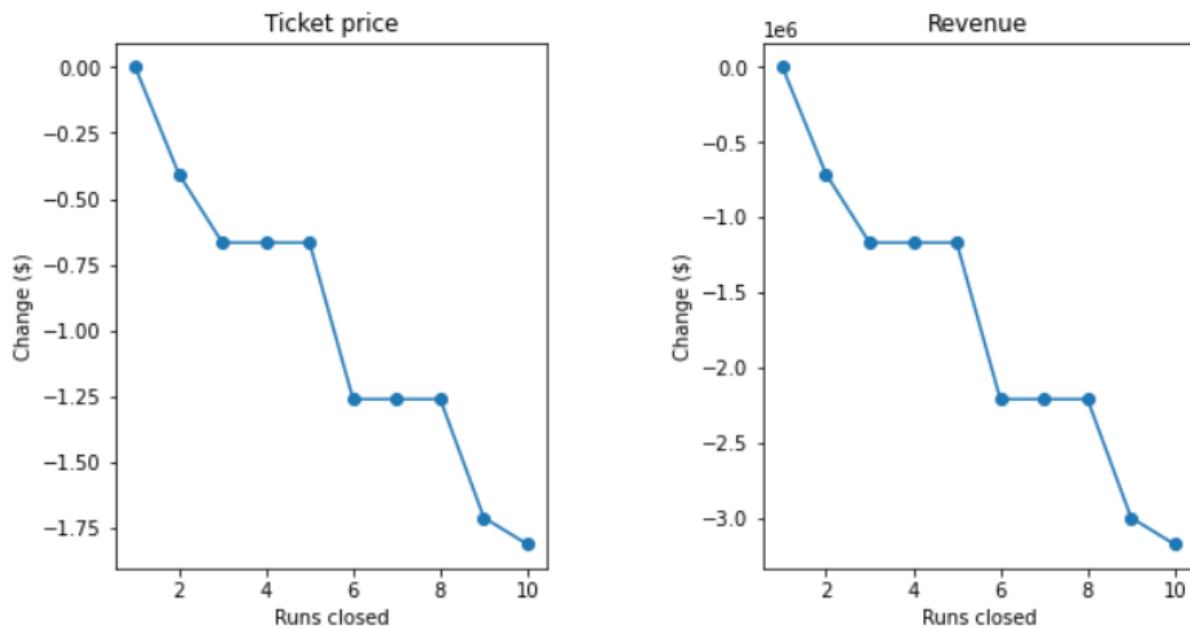
In this report, we present our recommendations for Big Mountain's business strategy in the upcoming skiing season.

1. Increase ticket price by at least \$0.88

Big Mountain currently charges \$81 for ticket price, and our model predicts a ticket price of \$95.87, with a mean absolute error of \$10.39. Specifically, this means that, in comparison with other ski resorts, Big Mountain's facilities support a ticket price of \$95.87. Looking at the most influential features determined from the previous stage, we observe that Big Mountain is on the high end in the market in terms of Snow making area, total number of chairs, number of fast quads, number of runs, longest run, and skiable terrain area. These high ranking attributes for Big Mountain justify how such a high ticket price can be supported given the facilities.

It may not be in the business' best interest to suddenly increase the ticket price right away to the \$95 range suggested from the model, which may deter customers. However, an increase in ticket price up from the original \$81 is necessary to cover the \$1.54 million cost of the newest additional chair lift. Based on the fact that 350,000 customers are expected this season, with each customer visiting for an average of 5 days, if daily ticket prices are increased by \$0.88, then the \$1.54 million cost will be covered. An increase of at least \$0.88 in the ticket price straightaway is therefore strongly recommended and justified since we would still be well less than the \$95 range and able to make back the \$1.54 million.

2. Closing 5 of the least-used runs without decreasing ticket price



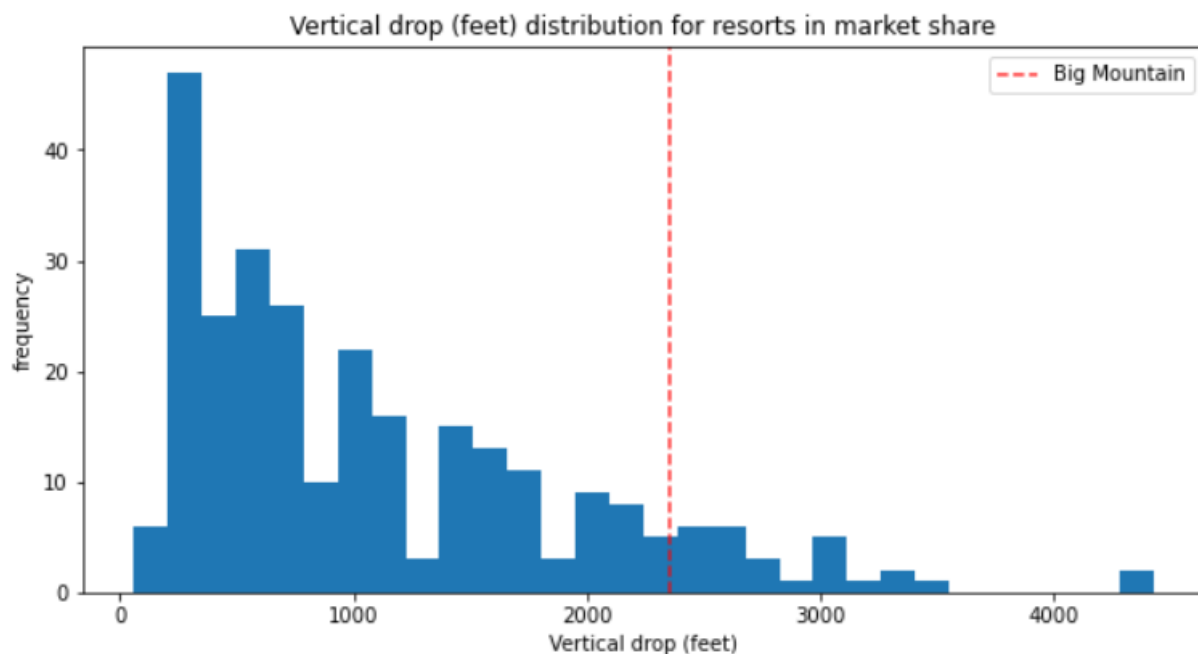
The business asked to investigate the effect on modeled ticket price of closing up to 10 runs. We found that closing 5 runs may be the most optimal strategy. As demonstrated in the graph based on our model, closing 5 runs would reduce the supported ticket price by \$0.67, and has no significant difference from closing 3 or 4 runs. After 5 runs, there is a significant change in supported ticket price.

Note that while closing 5 runs would reduce supported ticket price by \$0.67, it may not be necessary to actually reduce the ticket price, as our current ticket price is already well below the price range worth of our current facilities. So, closing 5 runs without reducing ticket price is recommended.

3. Investigate the impact of adding a run that increases vertical drop by 150 feet

We found that adding a run that increases vertical drop by 150 feet would support a ticket price increase of \$1.99, resulting in over \$3.47 million in additional revenue. We need more data from the business to determine whether \$3.47 million covers the cost of the addition of these facilities.

Indeed, the below graph supports this finding from the model; Big Mountain has room to improve in the vertical drop attribute:



4. Not recommended: more snow making and increasing longest run

According to our model, increasing snow making and longest run did not result in increased supported ticket price. Thus, increasing snow making and longest run are not recommended for

Mark Huang

increasing revenue. This is supported by the following graphs, which show that Big Mountain is already at the top of the charts for these attributes:

