Our examination of Big Mountain Resort’s ticket pricing strategy have led to the following conclusions:

1. The resort could support an increase in ticket price of at least $5
2. The proposal to increase the resort’s vertical drop would bring an increase of around ~$1.2 million in revenue
3. The proposal to close down the resort’s least used runs could also have benefits and should be considered further

Big Mountain Resort’s current ticket pricing strategy is based solely on the average pricing information of other resorts in its market share. A model based on this strategy gave us a mean absolute error in predicting ticket price of $19. We developed a better model based on the various features available at resorts that were correlated with ticket pricing and were able to decrease our mean absolute error to around $10.

According to our new model, the most important features at resorts that support higher ticket pricing are the existence of fast quad lifts, the number of runs available, the area of guaranteed snow, and the height of the vertical drop at a resort, though other features also play a role. Big Mountain Resort stands out in all of these categories, which is perhaps why it is already the most expensive resort in its market share in Montana.

However, we have reason to believe that Big Mountain Resort is still under-priced. According to our model, the resort’s features could support at ticket price of $97.96. Even when accounting for the model’s mean absolute error of $10.36, the current pricing of $81 is still under-priced. An increase of less than one dollar ($0.88) would make up for the resort’s increased $1.5 million dollar operating costs due to the new chairlift this year and would still keep the ticket pricing well under the cost supported by the resort’s current features. We would recommend even further increases to ticket price: an increase to $87.6 (the most conservative price within the mean absolute error of our model for resort pricing) would gain the resort millions of additional revenue and easily absorb the new chairlift operating costs for this season.

We examined the business’s potential proposals for increasing revenue. The proposal to close any number (up to 10) of the resort’s least used runs seems to have some potential. The closure of one run would not affect ticket price and so revenue according to our model, and though closing 2 and 3 successively reduce support for ticket price, if it were to close down 3 runs, closing down 4 or 5 would not induce a further lose in ticket price. Without further knowledge of operating costs per run we cannot make conclusive recommendations with regard to this proposal, but the closure of at least one more run seems like it deserves further consideration.

According to our model, the proposal to increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up would be profitable to the tune of around ~$1.2 million per year. Without knowledge of costs associated with this venture we cannot recommend it, but it deserves further consideration.

The other two proposals (including 2 acres of snow making cover and increasing the longest run by 0.2 mile) would not increase the level of the resort’s ticket pricing support significantly according to our model, where the most important features for supporting a higher ticket price are pictured below:

Chart, histogram

Description automatically generated