**Big Mountain Resort Pricing Analysis Report**

Chart, histogram

Description automatically generated Big Mountain Resort is looking to adjust its pricing model to better fit the facilities that Big Mountain has to offer as well as optimizing how its facilities are utilized. We are looking to increase ticket prices by at least 10% over the course of the season. After cleaning up the data, we began building a model to best predict the appropriate ticket price for adult weekend pricing. After a lot of assessment, we decided the most important things to consider were vertical drop, snow making area, total chairs, fast quads, runs, longest run (in miles), trams, and the skiable terrain area. Based on these features we built a model that would allow us to predict two things: (1) what price Big Mountain should place it tickets at and (2) what changes can be made to the facilities at Big Mountain to optimize its pricing. We found that Big Mountain’s pricing is lower than what it should be given its market placement. We can see that Big Mountain is roughly in the median range of pricing in the figure below:

After modeling, we see that based on its facilities, Big Mountain Resort could be pricing at around the $95.87 price point instead of its actual price at $81. This could be because Big Mountain has facilities near the top of the range in its market share in skiable area, total number of chairs, fast quads, and runs. As seen in the figures below, Big Mountain consistently is placed high in these important features. Given this market context, the modeling makes sense for Big Mountain. The first recommendation is that Big Mountain increase its price. Let us delve deeper into how Big Mountain can specifically alter its price and facility structure.

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Chart, line chart

Description automatically generatedWe understand that operational costs make up a large portion of the costs. In that regard, we should look at how we could close runs down to optimize the pricing strategy. We can see that closing one run will not make an impact on ticket prices. Closing two runs will cause a dip in pricing. The interesting results is once we get to three runs closed. After closing three runs, we see a dip in ticket price but we found that we could close up to five runs without further price decreases. Here is a figure showing more detail as to how closing runs could impact ticket pricing.

Most importantly, we modeled some facilities changes that Big Mountain could make to justify ticket price increases. Our top recommendation is that adding one additional run, increasing our maximum vertical drop, and adding one total chair would allow us to raise the price by $8.71 leading to an increased revenue of $15,065,471 before subtracting the increased operational costs. This model can test out other combinations of changes which can be explored further if the resort would like to look at other options. Having that data in the future would allow us to build a more accurate model that could consider operational costs and maximize the profits.