Recommendations for Big Mountain Resort

Big Mountain is a ski resort in Montana with 350,000 visitors. $1,540,000 is the cost of additional chairlift. $81 is what it prices its tickets at. After careful progress via the Data Science Method DSM, we were able to reach some conclusions that will be helpful to Big Mountain's business decisions.

First and foremost, let's begin by saying that Big Mountain is a resort to be reckoned with. It has many nice features compared to other Montana and smaller NY ski resorts. It's a big player in the ski resort business. We looked at several histograms and Big Mountain is above average in nearly every column. Through careful analysis, the most important features that customers are willing to pay top dollar for are number of runs, snow making, skiiable terrain, and chairlifts. Big Mountain resort should continue to expand operations, which means building more chairlifts and increasing runs and terrain, and snowmaking capacity. Any action in these areas warrants a higher ticket price and more demand.

The model that was developed for this analysis can take column inputs and associated delta values for each input. These inputs are features we want to tweak. For example, a question we could ask our model is, "What would our ticket price be if we added a run, increased our vertical drop by 150 feet, and added another chairlift?" We type these inputs into the model, and the model outputs: "This scenario increases support for ticket price by $2.38. Over the season, this could be expected to amount to $4,159,420." This was in fact, the desired scenario to recommend to the Big Mountain key players involved.

If Big Mountain wishes to cut costs and expenses, our model can aid. Big mountain can close runs. Our model says closing one run makes no difference. But closing 2 and 3 successively reduces support for ticket price and so revenue. If Big Mountain closes down 3 runs, it seems they may as well close down 4 or 5 as there's no further loss in ticket price. Increasing the closures down to 6 or more leads to a large drop. For example, if Big Mountain closes down 4 runs, their ticket price would reduce by $2.30. This would decrease revenue, but how much would Big Mountain save in operating costs by doing so? More than $5 million?

Much insight was gained into the ski resort business. Management needs take considerations based on their personal experiences if this model will be adequate or if they would like to go back to the data collection phase if necessary.