Big Mountain Resort

Project Report

Using data collected from ski resorts all over the country, we have put together a predictive model that shows ticket price based on changes made to resort offerings. Big Mountain Resort currently has a ticket price of $81 per day. The expected stay on average is 5 days for a total of $405 in revenue per person. It is our goal to determine if an increase in ticket price is supported based on the data of other ski resorts.

The features being investigated are snow making acres, vertical drop, longest run, and number of chairs. There are other features, but based on initial investigations it has been determined that there are only a few features that have a significant effect on ticket price.

All states were kept around, but then it was concluded that it was not useful and presented bias when specifically looking at Big Mountain Resorts data. Therefore all following figures focus on the state of Montana.

Removing runs will support a small decrease in ticket price. Removing 3-6 runs supports a ticket price decrease of $0.60. Whereas removing 6-9 runs supports a decrease of $1.25.

Increasing snow making acreage was found to have little to no support for ticket price increase. Therefore it is recommended to not invest in more snow making acreage.

Adding length to the longest run -- making it 3.5 miles -- has no support for ticket price increase. Therefore it is not recommended to lengthen our longest run.

The number of chairs and vertical drop have support for price increase. This comes from the requested prediction stating a 150 foot increase in vertical drop and an additional chair lift to facilitate the new run. Overall the support for ticket price increase is $1.99.

Ultimately, the prediction model supports an increase of $16. If we take into account the mean error of $10, then it is reasonable to assume an increase of $6 would be a safe course of action.