



Big Mountain Ski Resort in Montana has great features for the area. They just added in a new lift and would like to cover it's costs. In addition, they feel they can charge an increased ticket price based on their existing features.

Using data of ski resorts prices and features from across the country, we checked to see what, if any ticket price increase was supported by the data.

#### Data Results: Ticket Pricing



<sup>\*</sup>Without additional feature changes or updates.

# +18%

Without any feature changes, Big Mountain ticket prices should be able to support an 18% increase.

The model returns an expected mean absolute error of \$10.39, but it still suggests there is room for an increase in ticket pricing.

#### Modeled Scenarios

Most Important Features for Ticket Pricings:

Vertical Drop

**Total Runs** 

**Snow Making Acres** 

Length of Longest Run

**Total Lift Chairs** 

Number of Trams

**Fast Quad Lifts** 

**Skiable Terrain Acres** 

Modeled scenarios used an estimated **350,000** guests in the season with each guest skiing for **5 days**.

Permanently close up to 10 of the least used runs. Closing 1 run does not make an impact in ticket price/revenue. A small drop in ticket price/revenue is noted after closing 2 runs. Closing 3-5 yields the same drop of about \$0.70 in ticket price and \$1.20 in lost revenue. There are bigger drops from 6-10 run closures.

## Modeled Scenarios (cont.)

2 Increase the vertical drop by adding a run to a point 150 feet lower down, requiring the installation of additional chair lift. This scenario increases support for ticket price by \$8.60. Over the season, this could be expected to amount to \$15,065,471.

Increase the vertical drop by adding a run to a point 150 feet lower down, requiring the installation of an additional chair lift **and** add 2 acres of snow making cover.

This scenario increases support for ticket price by \$9.90. Over the season, this could be expected to amount to \$17,322,717.

### Modeled Scenarios (cont.)

Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres.

This does not make a predicted change to ticket prices as the Random Forest Model did not give the longest run feature very much importance. Not justified by the model.

#### **Data Summary**

Big Mountain lands at the **median to upper end** of each of the key features with the exception of trams, however most resorts have 0 trams, like Big Mountain. Big Mountain is already at the **highest end** of ticket pricing for the state; this should be taken into account to see if the local market is receptive to higher ticket prices.

The new lift in place is estimated to cost an estimated \$1,540,000 for the season. Using the given estimate of 350,000 guests each staying for 5 days, ticket prices only need to increase \$0.88 to cover the new lift costs.

# Conclusion

Big Mountain Ski Resort can support increased ticket prices to cover the newly installed lift & increase overall profits with confidence.

Potential feature updates require additional research into overall costs for implementation to be compared against expected increased revenue.

