**Recommendations for Big Mountain Resort**

***Project Context***

Big Mountain Resort, a ski resort located in Montana, with access to 105 trails, Glacier national Park, and Flathead National Forest views, accommodates approximately 350,000 people yearly. They are currently serviced by 11 lifts, 2 T-bars, and 1 magic carpet (for novice skiers). An additional chair lift has been added in order to help increase distribution of visitors across the mountain. Big Mountain will need to capitalize on increasing ticket prices far above average prices, and cut costs without undermining ticket prices.

The goals were to:

1. See whether Big Mountain was undercharging ticket prices
2. If ticket price was below, how would Big Mountain be able to select better values for ticket prices, and what will those values be.

In order to do this, we had to complete the following steps:

1. Re arrange data in order for data to make sense
2. Summarize, visualize and analyze what was seen in order to identify patterns
3. Removing out-of-value ranges, and impossible combinations in the data that could have led to misleading and/or incorrect results.
4. Clean data and process data in a clear, simple and concise manner in order to make predictive insights.

***Results***

The results indicate that Big Mountain Resort is undercharging at a price of $81.00, compared to other resorts, with a modeled price of $95.87.

There were three scenarios from the initial model results:

1. **Scenario 1** is the closing down of runs:
   1. Closing 1 run did not affect the revenue at all. ($0)
   2. Closing 2 runs affects revenue by decrease of approximately $500,000
   3. Closing 3 to 5 runs affects revenue by decrease of approximately $1M
   4. Closing 6 to 8 runs also decreased the revenue by approximately $2.3M.
   5. Closing 9 runs decreased revenue by approximately $3M
   6. Closing 10 runs decreased revenue significantly by well over $3M
2. **Scenario 2** is the increase of vertical drop by 150 feet, and the installation of additional chair lifts. This assists in ticket price increase of $8.61, which over the course of when Big Mountain Resort is open, could generate up to $15, 065, 471.
3. **Scenario 3** is also the increase of vertical drop by 150ft, with the addition of 2 acres of snow making cover, which will increase the ticket price to $9.90, higher than scenario 2’s projection of $8.61, which over the course of the season, could generate revenue of approximately $17, 322, 717.
4. **Scenario 4** increasing run by ¼ mile and adding 4 acres of snow making cover, which does not make a difference or generate any revenue.

***Recommendations***

Based on the four scenarios stated above, the best option will be scenario 3, because it generates Big Mountain Resort the most revenue. Secondly, Big Mountain should increase ticket prices because their actual price is below the modeled price. Lastly, Big Mountain should see the changes in profit if runs were to close down, which will have a negative impact on revenue.