**Summary Report**

This is a summary report of the investigation of ways Big Mountain Resort can increase annual revenue by $2M through capitalizing on its facilities and having better values for ticket pricing. Big mountain, a ski resort has recently added new facilities to help increase distribution of visitor across the mountain; resulting in an additional operating cost of $1,540,000 this season. It is believed that Big Mountain is not capitalizing on it facilities as much as it could since the resort’s pricing is based on the market average not their available facilities.

Data of various resort in different region or location was obtained. This data was cleaned and made ready for modeling to predict the expected ticket price. Using this model, the expected the ticket price for Big mountain was calculated. This was done taking into consideration big mountain’s available facilities or resource.

Big Mountain Resort modelled price is $95.87, actual price is $81.00. Even with the expected mean absolute error of $10.39, this suggests there is room for an increase. Generally, in Market Context Big Mountain above average, this was obtain using features that was important to the model.

For an expected number of visitors over 350,000, various potential scenarios for either cutting cost or increasing revenue were considered. According to the model, it was observed that increasing vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage increases support for ticket price by $1.99. Over the season, this could be expected to amount to $3,474,638.

Other scenarios did not have an effect.