**Big Mountain Resort:**

Summary of Features and Price Modelling

**Context:**

Big Mountain Resort (BMR) is a ski resort that offers many features for its customers. BMR recently installed a chairlift costing over $1.5 million to accommodate more visitors. The previous pricing strategy has been to charge a premium on top of the average price of a ski resort. BMR needs a better way to price its tickets while considering all the features that they offer

**Ticket Prices:**

BMR currently charges $81 per ticket. Our modelling suggests that the market value of a BMR ticket based on the features that BMR offers is $95.87. Even with a mean absolute error of $10.39, there is obvious reason to increase the price. It is important to note that this model has a high degree of uncertainty; BMR should raise its prices but be careful not to raise them too high.

**Other Ideas to Increase Profit:**

One idea that the data suggested is to add a ski run while increasing the vertical drop by 150 feet. With this change, BMR could raise ticket prices by $1.99 and have an increase in revenue of $3,474,638. Depending on expenses, that new feature would overcome the $1.5 million BMR invested into the chairlift.

Another idea is that BMR closes some of the ski runs to cut costs and increase profits. Cutting a single ski run will not affect the ticket price and would decrease costs. The graph of run closures vs market ticket price is a stair function, so a different number of closures can produce significantly different results.

**Ideas for Future Data to Collection:**

There is only one single dependent variable. Since its impossible to separate out the features and assess them on their own specific prices, there is more uncertainty in the conclusions of the model.

Two particularly important variables that were not in the dataset were:

* GDP of surrounding area codes
* Percent of out of state customers.

With these variables we would be able to know if we could charge a premium on top of the market rate.