

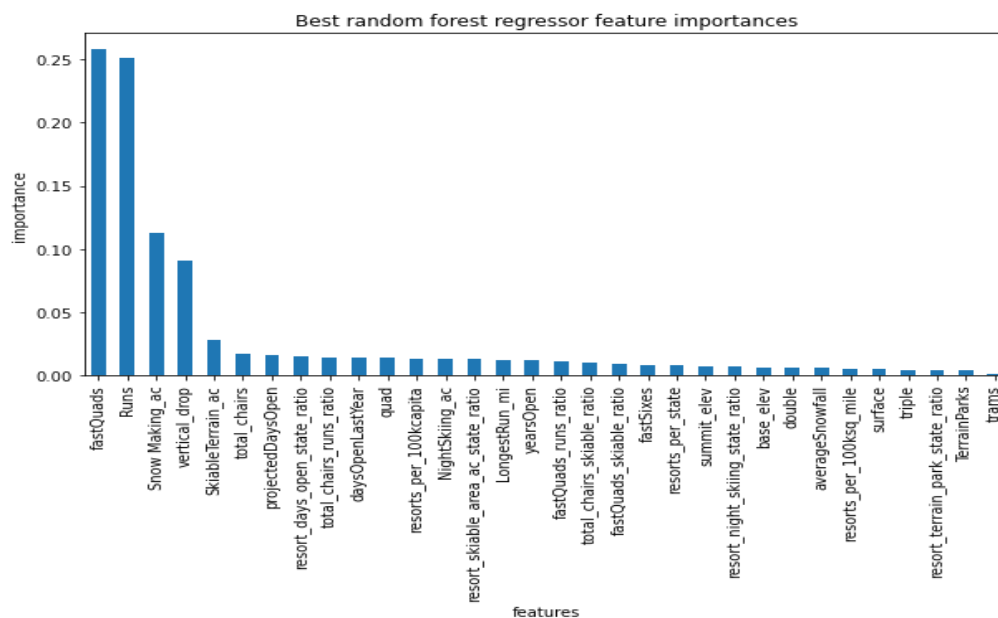
Big Mountain Resort is facing an underutilized feature/facilities problem. There is concern that BMR is undercharging their adult weekend ticket price when they could be charging more because of the popular features that skiers value.

Big Mountain Resort is currently charging \$81 for adult weekend tickets. BMR is strangling their revenue by charging so little for weekend tickets. At first glance, a raise in weekend ticket prices may seem counterintuitive, BMR already charges the most per weekend ticket in Montana.

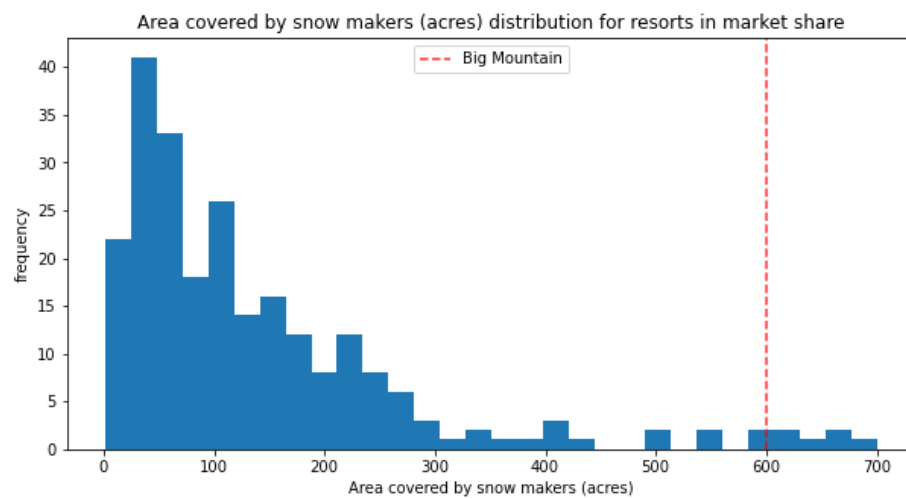


BMR can get away with a significant increase in ticket prices because of the popular features the resort has.

The random forest regressor provided a bar graph of the features that are well correlated to ticket price. As you can see, customers value fastQuads, more runs, guaranteed snow, and the amazing vertical drop the most in a ski resort. A resort that boasts these features (BMR) would benefit from an increase to ticket price.



Compared to the other resorts in the data set, BMR consistently ranks high in regards to number of features/units.

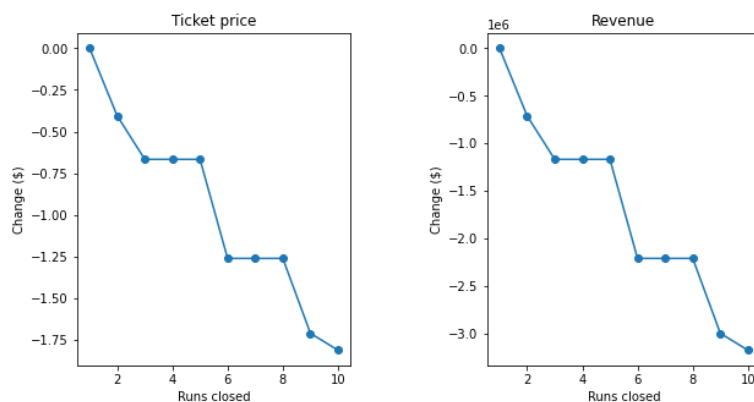


For example, BMR boasts a healthy amount of artificial snow that is valued by customers. With all that established, the BMR's modeled price for an adult weekend ticket is \$95.87. The model gave an expected mean absolute error (MAE) of \$10.39, which provides extra room for an increase.

In my opinion, scenario 3 is BMR's best option. This scenario involves adding a run, increasing the vertical drop by 150 feet, adding another chair lift, and adding 2 acres of snow making.

This scenario increases support for ticket price by \$9.90, and can be expected to amount to \$17,322,717 over the course of the season.

Scenario 1 involves removing up to 10 of the most underutilized runs. Removing 5 runs results in the ticket price falling by about \$0.75. Operating costs were not included in the dataset so there is no quantification of how much money would be saved by reducing the operating costs of these runs. Regardless, the \$0.75 decrease in adult weekend ticket price still leaves room for a significant increase of ticket price.



In summary, BMR has popular features that skiers are willing to pay more for. Executives should feel confident that adding features in scenario 3 and removing runs in scenario 1 will justify an increase in adult weekend ticket price.