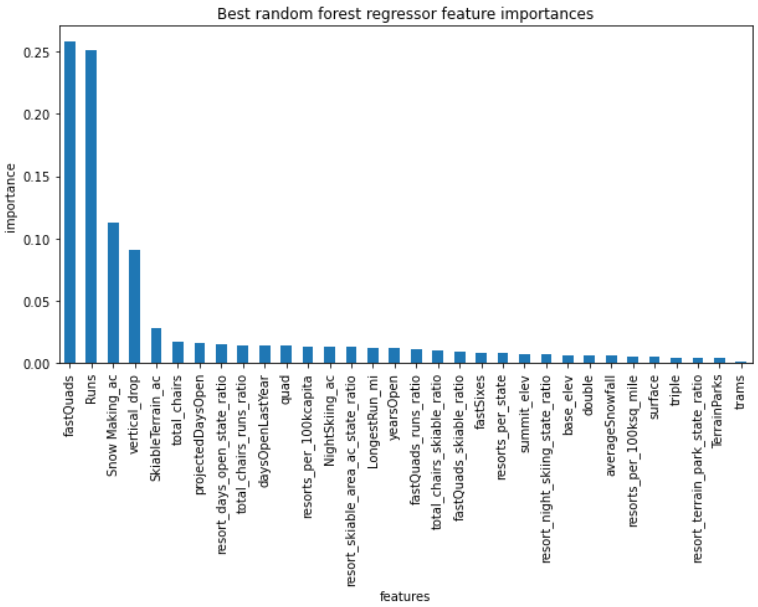
Big Mountain Resort Report

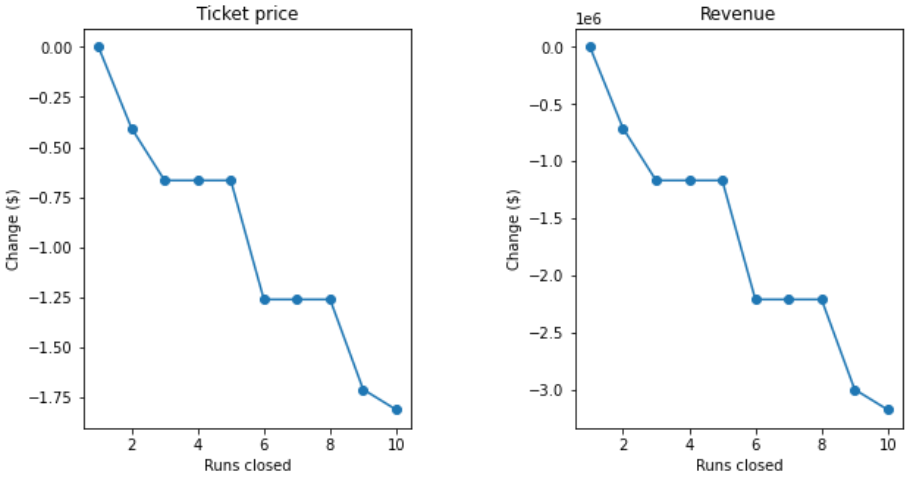


As the bar chart shows, features that came up as important in the modeling included:

- Snow Making_ac
- total_chairs
- fastQuads
- Runs
- LongestRun_mi
- trams
- SkiableTerrain_ac
- vertical _drop

Big Mountain Resort can increase revenue by either cutting costs or increasing revenue (from ticket prices). First, look at the 4 options the resort want to explore:

1. closing down up to 10 of the least used runs.



The model says closing one run makes no difference. Closing 2 and 3 successively reduces support for ticket price and so revenue. If Big Mountain closes down 3 runs, it seems they

may as well close down 4 or 5 as there's no further loss in ticket price. Increasing the closures down to 6 or more leads to a large drop.

2. The model shows adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift, will increase the ticket price by $1.99. Over the season, this could be expected to amount to $3474638
3. Same as number 2, and adding 2 acres of the snow-making cover makes no difference.
4. Increase the longest run by 0.2 miles to boast 3.5 miles length, requiring additional snow making coverage of 4 acres, makes no difference either.

Finally, Big Mountain Resort modelled price is $95.87, actual price is $81.00.
Even with the expected mean absolute error of $10.39, there is room for an increase.

So my recommendation for Big Mountain Resort is to:

1. Close 5 least used runs
2. If the cost of increasing the vertical drop by 150 feet, and installing an additional chair lift is much less than the expected increase of $3474638, they resort should do it.
3. Increase the ticket price to $86-$95