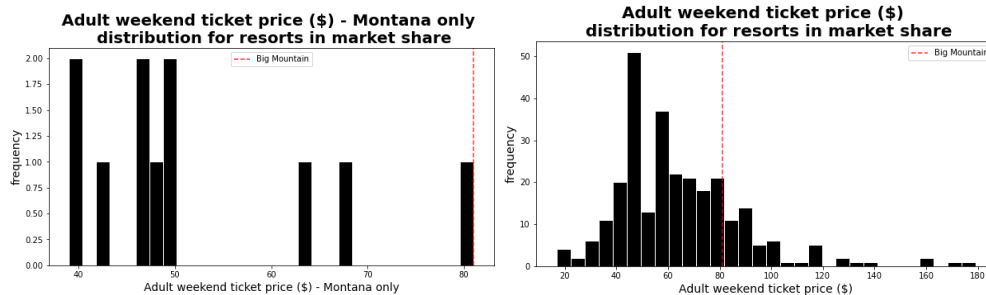
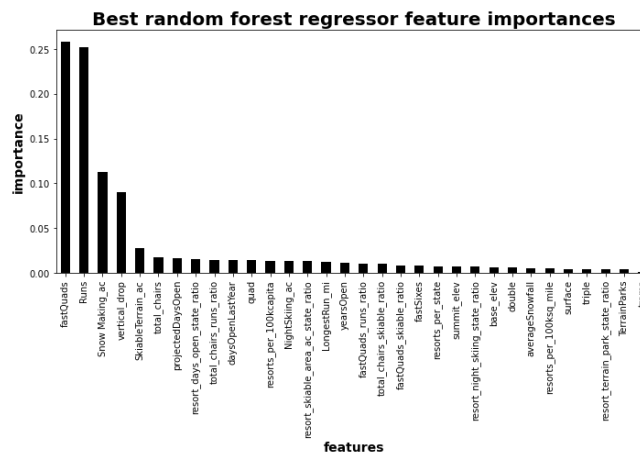


## Big Mountain Resort Ticket Pricing Strategy

Big Mountain Resort (BMR) faces an increase in operation costs, \$1.54 million annually, for a new chair lift. BMR currently charges its visitors \$81 for an adult weekend ticket, which is the highest in the Montana-based market it has traditionally been considered a part of and higher than the \$63 national average. However, BMR ranks well above average for many facilities that justify higher ticket prices.

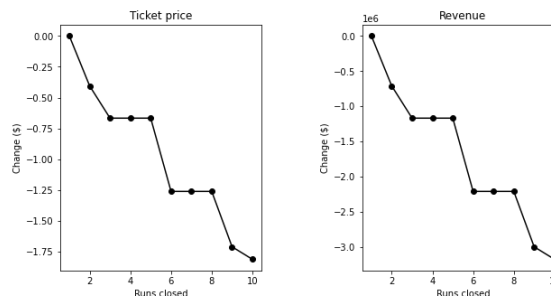


Random Forest modeling using a national data set of 330 ski resorts predicts a ticket price for BMR, given its current facilities, of \$95.85, with an average absolute error of \$10.39. Using the worst-case scenario, a ticket increase of \$4.48 falls within the model for the status quo, as BMR ranks high in the most important features of the model.

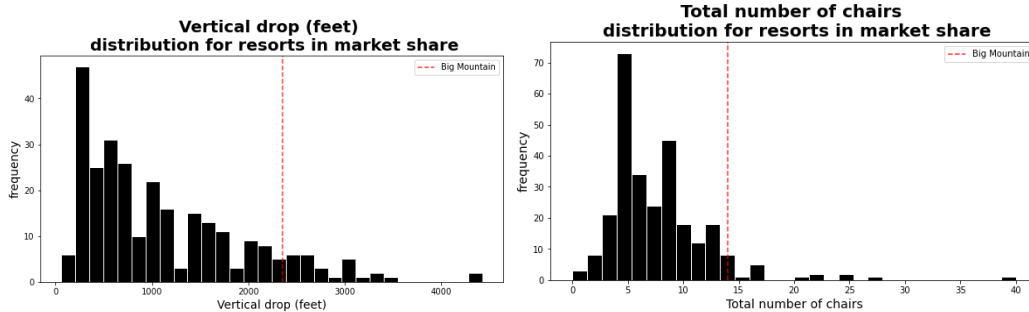


Our data team has analyzed 4 scenarios proposed by BMR business leaders to justify driving up the cost of tickets to increase revenue and offset the operational costs. The scenarios and their model outcomes are as follows:

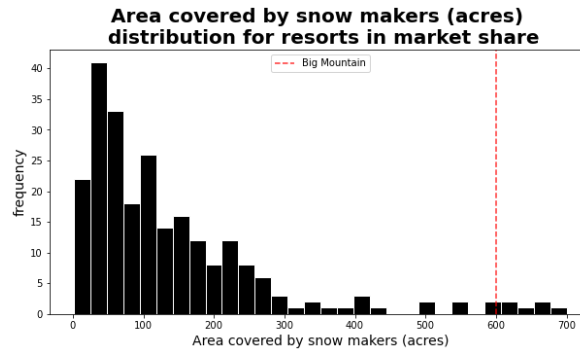
1. Close runs to reduce operational costs: no support for increased ticket price.



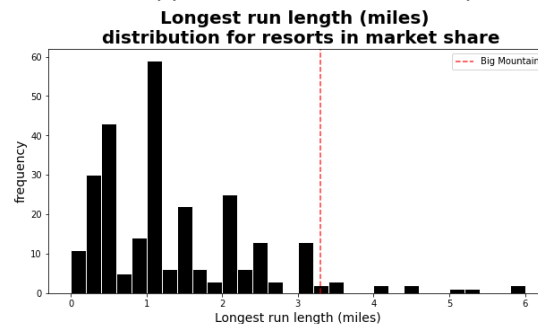
2. Increase vertical drop by 150 ft by extending a run at the base and adding a chair lift to allow access back up: support for \$1.99 increase in modeled ticket price, corresponding to \$3,474,638 increased revenue (assuming 350k people visiting an average of 5 times this year).



3. Increase vertical drop by 150 ft as above, but with the guarantee of 2 additional acres of snow making: support for \$1.99 increase in modeled ticket price and \$3,474,638 increased revenue, as above.



4. Increase the longest run from 3.3 miles to 3.5 miles with the guarantee that the additional 4 acres will have manmade snow: no support for increased ticket price.



Our model suggests that of the scenarios, 2 or 3 supports the greatest increase in ticket cost. But both will require up-front investments and sustained operation costs. Since the goal is to offset the cost of the new chairlift this year, the suggested action for BMR executives is to reframe the market and use the model's predicted status-quo ticket value to raise prices to \$85.48 this year, which will increase total revenue by more than \$7 million if the number of visitors this year meets or exceeds last year's numbers. It will offset the \$1.54 million operating cost of the chair lift and allow BMR to invest in scenario 3 (preferable to scenario 2 for skier satisfaction) in a few years, when cumulative profits exceed the cost of upgrading features. When scenario 3 is implemented, BMR can raise the ticket price again by \$1.99 and expect an additional increase revenue of \$3.47M, bringing the total increased annual revenue to \$11.3M.