

Guided Capstone Project Report

BIG MOUNTAIN RESORTS! – THINK BIGGER!

- WITH 100 skiable trails!
- Land in MULTIPLE National Parks!
- WELL OVER a quarter of a MILLION skiers/snowboarders of ALL ABILITY levels served each year!

If Big Mountain Resorts is going to adapt operations in a manner that can increase profitability, while maintaining or improving the customer experience, it will start with Big Mountain Resorts recognizing what makes our product and services special, expanding upon that, and marketing it to the broadest customer base possible.

Big Mountain Resorts will aim to increase profitability by enhancing customer usage rates, rebranding to attract a national audience, and maintaining its reputation for exceptional service and affordability. Over the next 12 months, we will grow customer usage by at least 15%, improve brand recognition by at least 10%, and grow revenue to offset \$1.54 million in new equipment costs, all without compromising the customer experience.

In reviewing extensive data on 330 ski resorts across the country, valuable insights were made regarding Big Mountain Resorts' current standing, as well as a strategic path forward that will be profitable to the company. A multitude of factors were deeply analyzed and compared to ticket pricing to find out if there were any correlations. In the end, the factors with the most significant positive correlation to ticket pricing were: maximum height of vertical drop; acreage covered by snow-making machines; total number of chair lifts; highest number of fastQuad chair lifts; number of runs; and overall skiable terrain acreage (See Figures 1 & 2). Big Mountain Resorts compares favorably in all of those aspects. The machine learning model designed to predict a fair ticket price taking in all resort features projected a ticket price of \$95.87.

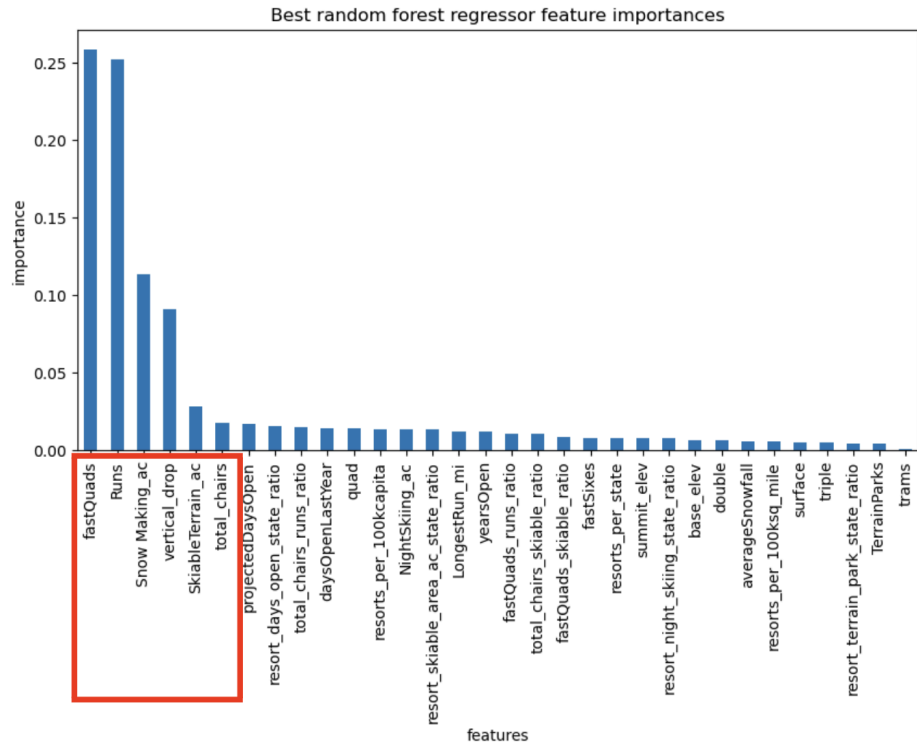


Figure 1 - Ski resort features, ranked by significance to ticket pricing.

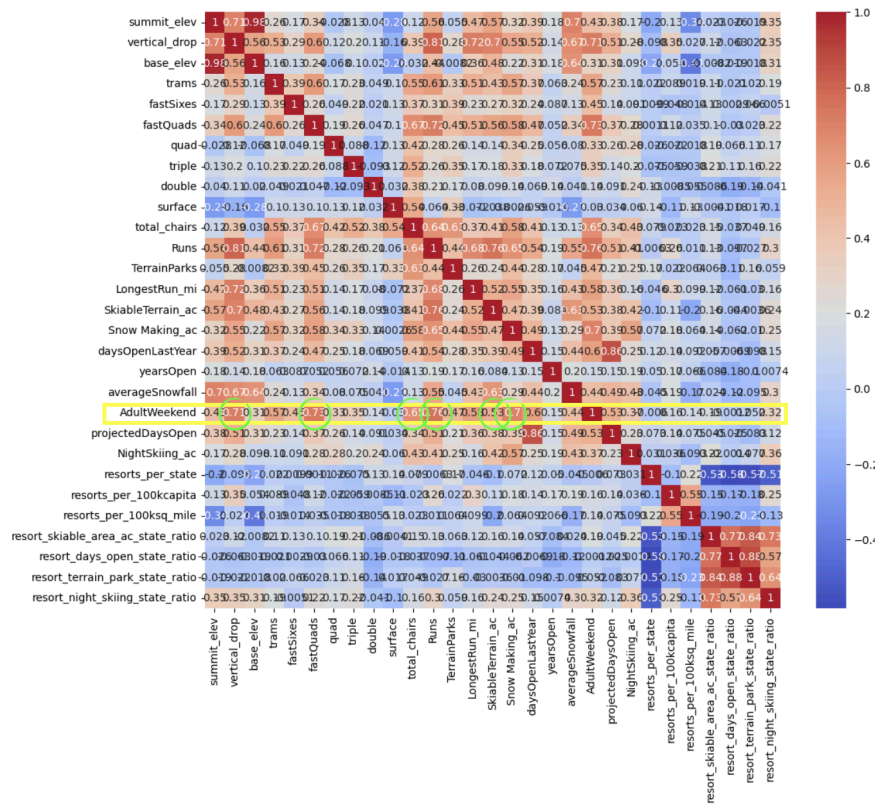


Figure 2 - Heatmap showing strength of correlation between ticket price and resort features.

Although the model predicted a price of \$95.87, Big Mountain Resorts would be wise to consider additional factors before setting that as its price moving forward. The model itself has a mean absolute error of \$9.64, so it is not as easy as simply setting that as the new price. Currently, Big Mountain Resorts charges \$81.00 per ticket, which is the highest in the state of Montana. Big Mountain Resorts compares favorably to its competition in the state, as shown in Figure 3.

Big Mountain Resorts compared to other ski resorts in Montana

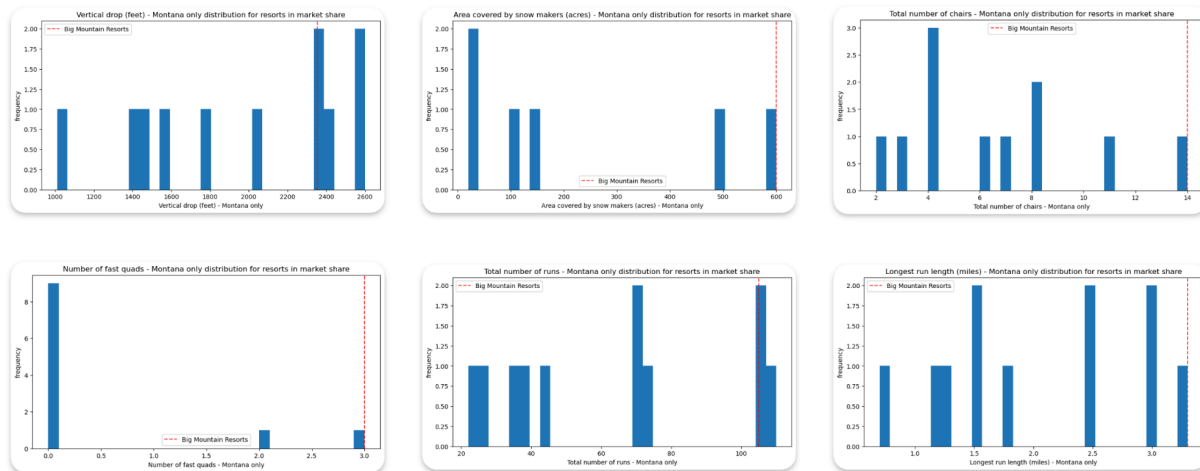


Figure 3 - Big Mountain Resorts standing in Montana in the six key features.

In analyzing ways to make improvements to the resort's features and offerings, it has been determined that cuts to its offerings (100 trails as compared to 105) would be more cost effective than additions (no predictive market value increase associated with modifying the longest run from 3.3 miles to 3.5 miles). The recent capital investment of adding a new chair lift was prudent and aligns to features that appeal to consumers. The recommendation for a new ticket price is more modest—raising the price from \$81.00 to \$82.99. With a projection of 350,000 expected visitors, there would be an expected revenue of \$3,474,638.

Now that the data is known, Big Mountain Resorts needs to THINK BIGGER about itself as a company. Stronger, more focused marketing on what the enticing features that the resort boasts will justify the modest price increase, and should make the targeted financial goals achievable. Big Mountain Resorts has the most chairs and most fastQuads in the state—including a newly installed one in the past year; Big Mountain Resorts has the longest ski run in the state with a 3.3 mile long trail; Big Mountain Resorts has the highest acreage of guaranteed snow covered skiable terrain; Big Mountain Resorts is top 3 in the number of runs (even if reducing the number from 105 to 100, as is proposed); and Big Mountain Resorts is top 5 in highest vertical drop. Big Mountain Resorts can offer skiers and snowboarders of all ability levels BIG action, BIG fun, and BIG adventure...it is time to THINK BIG at Big Mountain Resorts!