Big Mountain Resort Ticket Pricing Analysis

Problem Identification

Big Mountain Resort has an additional \$1.54M in operating costs this season

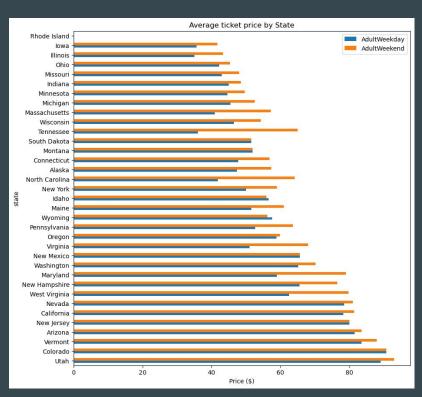
• We need to become more data-driven in our ticket pricing strategies and find ways to offset this operating cost

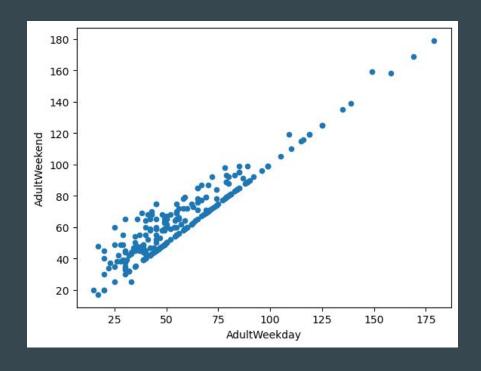
 We need to identify the value of our facilities to see if an increase in ticket prices would be worthwhile.

Recommendation / Key Findings

- Big Mountain is currently charging \$81.00 per tick. Our model supports increasing the price to \$95.87 given that the resort ranks highly on several key metrics.
- In our proposed business solutions, adding a run, increasing vertical drop, and installing an additional chair lift would justify \$1.99 increase in prices.
- Based on an average of 350,000 visitors at an average of 5 tickets per visitor, this would result in an additional \$3,474,638 in revenue
- I would recommend increasing prices by \$2 given our new chair lift and model supporting an increase.

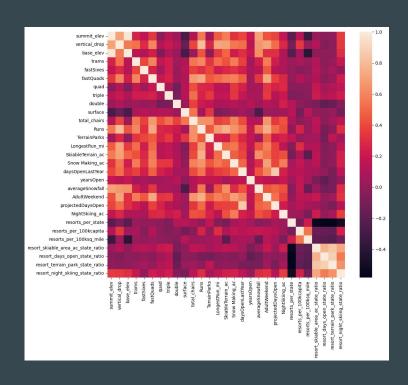
Average Ticket Prices by State and Weekday/Weekend

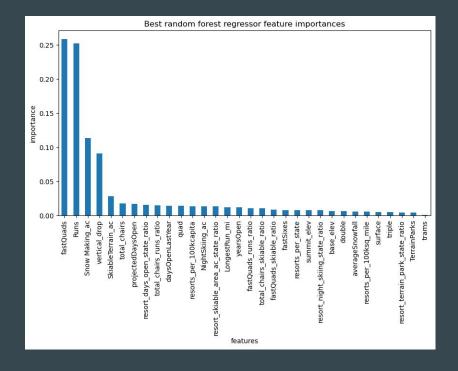




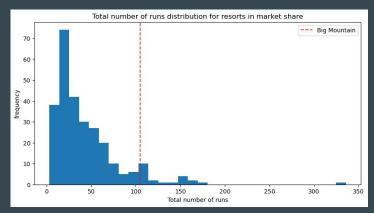
Correlation of Ticket Prices and Features

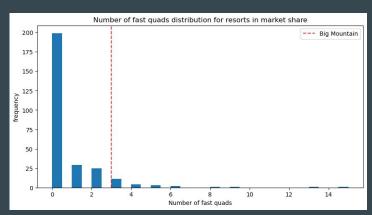
Runs, total chairs, fast quads, and vertical drop had the strongest correlation with ticket prices.

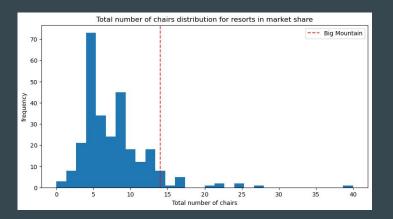


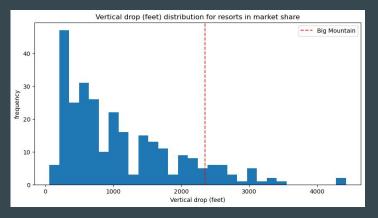


Big Mountain Ranks in Key Features









Conclusion

- We used a Random Forest Model for our data modeling as this had the lowest mean absolute error at \$9.54
- Our model supports nearly a \$15 increase in ticket increases
- The model also justifies increasing prices when adding a run, increasing vertical drop, and installing an additional chair lift
- We suggest the prices should increase by \$2 resulting in an estimated \$3,474,638 in revenue