Big Mountain Resort: Optimizing Ticket Pricing Strategy

Data-Driven Approaches to Revenue Enhancement

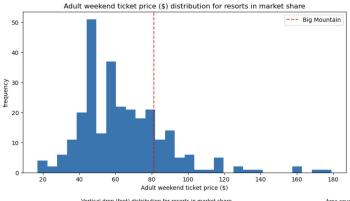
Hyunjin Kim - Aspiring Data Scientist 12/26/2023

The challenge at Big mountain resort

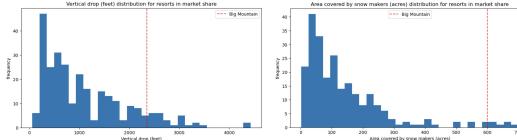
Objective: Develop a ticket pricing strategy to increase Big Mountain resorts revenue by 30%.

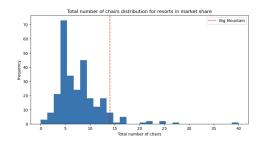
Right now Big Mountain Resort uses a mean ticket pricing strategy which does not take advantage of the resorts many features.

Market Position and Opportunities



Big Mountain is currently pricing near the average ticket price for tickets when compared to other resorts in the market.





However, Big Mountain Resort distinctly excels in several key features that justify a higher price point in the market.

Strategic Pricing Recommendations

Based on the features and the model we created we discovered that Big Mountain Resort's modelled price is \$95.87, the actual price is \$81.00. This discrepancy indicates a potential for an additional annual revenue of approximately \$5,204,500

Even with the expected mean absolute error of \$10.39, this suggests there is room for an increase.

This recommendation was based on a random forest model, as this model provided a lower cross validation mean error

Insights from Data Modeling

Linear Regression

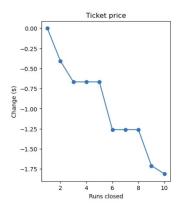
Mean absolute error: \$10.49 -

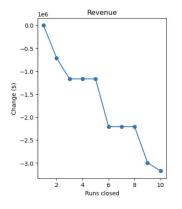
Random Forest Regression

Mean absolute error: 9.64 -

Impact of Resort Feature Changes

Scenario 1: Close upto 10 of the least used runs





Closing 1 run appears to have no effect.

If 3 are closed then upto 5 can be closed with the same drop in ticket price and revenue.

Impact of Resort Feature Changes

Scenario 2: Adding 1 run, Increasing the vertical drop by 150 feet, and installing a new chair lift.

This scenario increases support for ticket price by \$8.61

Over the season, this could be expected to amount to \$1.5 Million

Scenario 3: The same as 2 but also adding 2 acres for snow making This scenario increases support for ticket price by \$9.90 Over the season, this could be expected to amount to \$1.7 million

Scenario 4: increasing the longest run and adding 4 acres for snow making This scenario saw a change of 0.0 in both ticket price and revenue.

Strategic Conclusions

Big Mountain should look to close at least 1 but not more than 5 runs to cut the maintenance cost of its least used runs.

The next step would be to compare Big Mountains features with market competitors to adjust current ticket price.

Next, look to the features that would have the greatest impact, such as increasing the vertical drop, installing an additional chair lift, and adding more acres for snow making.

Comparison of Big Mountain features vs Competitors

