

Big Mountain Resort Ticket Pricing Analysis

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Data from: Springboard Data Science Bootcamp

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Problem

- We need to optimize ticket pricing for Big Mountain Resort to balance and capture:
 - Market Competitiveness
 - Accurate reflection of Amenity Value
- Big Mountain also needs to consider the increased operating costs of \$1,540,000 from the recently installed additional chair lift

Key Findings

- Current Ticket Price:
 - \$81.00
- Random Forest Regression Model suggested ticket price based on Big Mountain Resort's facilities:
 - \$96.78
 - Even with the expected MAE of \$10.32, this suggests there is room for an increase.
- Big Mountain can also close up to 5 runs a day without indicating a need for a reduction in ticket price.

Modeling Results and Analysis

- After review of nationwide ski resort data, four features have a strong correlation with ticket pricing:
 - fastQuads
 - SnowMaking_Ac
 - Night_skiing_state_ratio
 - Runs

Modeling Results and Analysis

- Big Mountain should consider closing up to a total of 5 runs as the model suggests this number will only lead to a slight price decrease. They should not close more than 5 runs, or they run the risk of a much larger drop in price.

Modeling Results and Analysis

- Increase vertical drop by lowering a run 150ft and increase acres of snow cover by two to justify a price increase of \$2, which could increase revenue by over \$3.4M

Recommendation

- Raise ticket prices by \$7
- Close up to 5 runs a day to save on operational costs
- Increase vertical drop by lowering a run 150ft and increase acres of snow cover by two to justify a price increase of \$2, which could increase revenue by over \$3.4M

Conclusion

- The analysis suggests a potentially higher ticket price as well as a few operational changes to increase overall revenue and value to customers.
- Moving forward, by continuing to address data limitations, investigating price discrepancies, and constantly updating the model with new data, Big Mountain can continuously refine its pricing strategy for sustained growth and long term success.