

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green. They are positioned diagonally, with the blue one partially covering the green one.

Big Mountain Resort

Guided Capstone Presentation



Problem Identification

- Big Mountain Resort would like some guidance on how to select a better value for the price per ticket to either:
 - Cut costs without undermining ticket price.
 - Support an even higher ticket price.



Problem Identification(Continued)

- With installation of an additional chair lift costing over \$1.5 million, Big Mountain Resort wants to implement a more data driven business strategy.



Recommendation and Key Findings

- An increase in vertical drop by adding a run to a point 150 feet lower down.
- Installation of additional chair lift to bring skiers back up.
- Adding no additional snow making coverage.
- These recommendations suggest a ticket price increase by about \$2.25, resulting in approximately \$3.9 million revenue over the season.



Modeling Results and Analysis

- Big Mountain Resort ticket price average is currently \$82.53.
- The data analyzed reveals a Mean Absolute Error of \$14.31, which surely indicates room for a ticket price increase.



Modeling Results and Analysis(Continued)

- Modeling indicates that closing 1 run makes no difference in revenue.
- Successfully closing 2-3 runs Reduces support for ticket price increase.
- Closing 4-5 runs indicates no further loss or gain.



Modeling Results and Analysis(Continued)

- Any amount of run closures after 6 results in a large drop in support for a ticket price increase.
- Modeling also indicates that an increase in snow making area would, again, make no difference.



Summary and Conclusion

- With all of this data, the model I chose to use was a Random Forest model; which has tested consistent estimates with the various performance results.
- My other reason for choosing this model is the ability to use the estimate on different areas of data for additional proactive solutions and/or predictions for conflict resolution.