

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 greenish-blue. They are both tilted at an angle.

Big Mountain Ski Resort Presentation

By Brian Bui



Problem Identification

What is the problem?

How can Big Mountain Ski Resort find a better value for their ticket prices either through cutting operational costs in different areas or justify a price increase through their current facility equipment investment?

Stakeholders:


Jimmy Blackburn, Director of Operations

Alesha Eisen, Database Manager



Recommendation and key findings

- One way for Big Mountain Ski resort revenue would be to increase the prices of AdultWeekend prices by \$1.99.
- From our models, we see that the resort exceeds in most of the category offerings compared to its competitors.



Modeling results and analysis

- Two models were trained and tested on the pre-processed ski_data dataset.
- The models were linear regression and random forest regression,
- The models had several features that affected the variable of AdultWeekend price
- For linear regression mode, the key features were: vertical_drop, Snow making_ac, total_chairs, and fastQuads
- For random forest model, the key features were: fastQuads, Runs, Snow Making_ac, and vertical_drop
- Random forest model has a lower cross-validation mean absolute error by \$1



Modeling results and analysis

- The model price said to be \$95.87, compared to the current ticket price which is \$81.
- This suggest there is room for an increase in the price for AdultWeekend tickets.



Summary and conclusion

- From our findings, there is room for an increase in the AdultWeekend price ticket, so modeling with the different key features can help find a better price value.
- Also, looking at the operating cost of the resort in a deeper level can provide insights on where the resort can try to cut cost without ruining the integrity of what the resort has to offer.
- We expect an attendance of 350,000 people on average buying a 5 day ticket.
- AdultWeekendprice ticket should at least increase the price by \$1.99 to obtain the expected revenue of \$3,500,000