**Big Mountain Resort: solving the revenue dilemma**

Big Mountain Resort, after investing over a million dollars to enhance its offerings and services, still faces a revenue gap. The challenge lies in striking the right balance between cost-cutting measures and revenue-boosting strategies. Some of the company’s available options are discussed below:

1. **Closing Runs**: The resort is considering permanently closing up to 10 of its least-used ski runs. However, our analysis reveals that closing just one run won’t significantly impact revenue as shown in the plots below. Closing more runs could even reduce ticket price revenue.

A graph of a price

Description automatically generated with medium confidence

1. **Vertical Drop and adding a chair lift**: Adding a new ski run to increase the vertical drop by 150 feet seems promising. Coupled with an additional chair lift, this could raise ticket prices by $2.22. The seasonal revenue projection stands at an impressive $3,888,889. But we must carefully assess the extra operating costs to ensure profitability.
2. **Snow Making and Vertical Drop**: While adding 2 acres of snow making to the vertical drop might not justify a further ticket price increase, it would increase operational costs. Balancing these factors is crucial.
3. **Longest Run Expansion**: Increasing the longest run by 0.2 miles, along with 4 acres of snow making, doesn’t impact ticket prices. Our recommendation: prioritize other scenarios that contribute directly to ticket price increases.

**Overall Recommendations to Leadership**:

1. Our model suggests that current ticket prices are underpriced. Big Mountain Resort modelled price is $97.96 (mean absolute error of $10.36) and current actual price is $81.00. There is potential for an increase compared to similar resorts in the market.
2. Installing a new chair lift is a smart move, but we must carefully evaluate associated operating costs.
3. Testing and Implementation: Consult with model creators, gather feedback, and raise awareness about model parameters.
4. Integration with Business Intelligence Systems: Integrate the pricing model into BI analytics for independent scenario testing.