Guided Capstone Project Report

Executive Summary:
This report presents data-driven recommendations for Big Mountain Resort to optimize its pricing strategy and enhance its facilities. Through comprehensive modeling and analysis, we have identified opportunities for improving revenue, visitor experience, and overall profitability.

1. Pricing Strategy Optimization:
The analysis indicates that Big Mountain's current ticket price of $81.00 has room for adjustment. The modeling suggests that the resort could potentially support a higher ticket price of approximately $95.87, considering the existing facilities and features. The recommended increase is rooted in data-driven insights that align the price more closely with the perceived value offered by the resort.

2. Scenario-Based Improvements:
We explored several scenarios to identify improvements that could positively impact the resort's profitability. Among the scenarios, the one that adds 0.2 miles to the 'LongestRun_mi' and 4 to 'Snow Making_ac' appears promising. This scenario predicts a significant increase in ticket price, indicating that these specific enhancements could attract visitors and increase the resort's competitiveness.

3. Operating Cost Considerations:
The addition of a new chair lift introduces an operating cost. To cover this cost, we recommend factoring in the operating cost per ticket. Based on the assumption that each visitor buys 5 day tickets, this additional cost can be distributed, enabling the resort to maintain profitability.

4. Gradual Run Closure Testing:
We propose a gradual approach to run closures. By temporarily closing less popular runs during off-peak times and utilizing A/B testing, the resort can assess the impact on visitor experience and revenue. Data-driven decision-making will ensure that any closures are implemented in a manner that enhances overall performance.

5. Accessible Data-Driven Tools:
To enable ongoing decision-making without requiring continuous involvement from data scientists, we recommend developing an interactive tool. This tool will empower business analysts to input parameters, simulate scenarios, and explore outcomes. It can be hosted on an internal platform, facilitating easy access and usability.

6. Conclusion:
Big Mountain Resort has the potential to enhance its profitability and visitor experience through data-driven decision-making. Our recommendations are based on rigorous modeling and analysis, providing a roadmap for optimizing pricing, facilities, and operations. By leveraging these insights, the resort can strategically position itself for sustained growth and success.