# Big Mountain Resort Ticket Price Evaluation Report

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# Problem Identification



## What is the problem?

Big Mountain Resort is a premium ski resort in Montana. It recently installed an additional chair lift that increases operating costs $1.54M for the current season

The current ticket pricing model is based on the market average. This is a generic strategy that does not capitalize on Big Mountain's premium facilities.

**The goal of this project is to determine the optimal price for lift tickets at Big Mountain Resort.**

## How will we approach this?

Evaluate current pricing strategy

Obtain ski_data dataset containing pricing and facilities information on all US ski resorts

Run scenario analytics on different pricing strategies.

Review the output of the models, run tests and choose the best pricing model

Deploy pricing model and test strategy on consumers

## How do we define success?

Payback period to break even within a reasonable amount of time (by end of next FY).

Customer willingness to pay does not decrease below a reasonable threshold as a result of ticket price increases

Deliverable: a self-serviceable pricing model for Big Mountain Resort business analysts to utilize without Data Science support

# Executive Summary (Recommendations & Key Findings)



| | |
|---|---|
| Overall recommendation | Scenario 2 (new ski run) is the recommended choice, which involves:<br><br>1. adding a new ski run, increasing vertical drop +150 feet<br>2. increasing ticket price by $2 |
| Drivers of decision | Adding a new ski run with an increased vertical drop of 150 feet offers a projected seasonal revenue gain of $3,474,638 from the ability to support a $2 ticket price increase. |
| Next steps | Deploy revised pricing strategy<br><br>Instill checkpoints at end of every month going forward to analyze how demand is shifting with revised pricing structure |

# Scenario analysis



| | *Deep dives to follow*<br>**Scenario 1**<br>*(Run Closure)* | **Scenario 2**<br>*(New Ski Run)* | **Scenario 3**<br>*(New Ski Run + Snow Making Expansion)* | **Scenario 4**<br>*(Extending Longest Run)* |
|---|---|---|---|---|
| Description | Simulated closure of the 10 least-used runs to reduce operating costs. | Modeled the addition of a new ski run with a 150-foot vertical drop increase | Same as scenario 2 with addition of expanding snowmaking area by 2 acres | Simulated increasing the longest run by 0.2 mi and guaranteeing its snow coverage by adding 4 acres of snow making capability |
| Pros | Potential for significant cost reduction | Indicated a potential seasonal revenue gain of $3,474,638 due to the increased ticket price support of $2. | Yielded similar projected revenue growth to scenario 2 | N/A |
| Cons | Minimal impact until closure of 4+ runs<br><br>More substantial closures (6+ runs) likely to result in a noticeable drop in ticket price | Will incur some operational costs | Minimal additional benefit from a small increase in snowmaking capacity | N/A - no difference whatsoever |

Recommended scenario

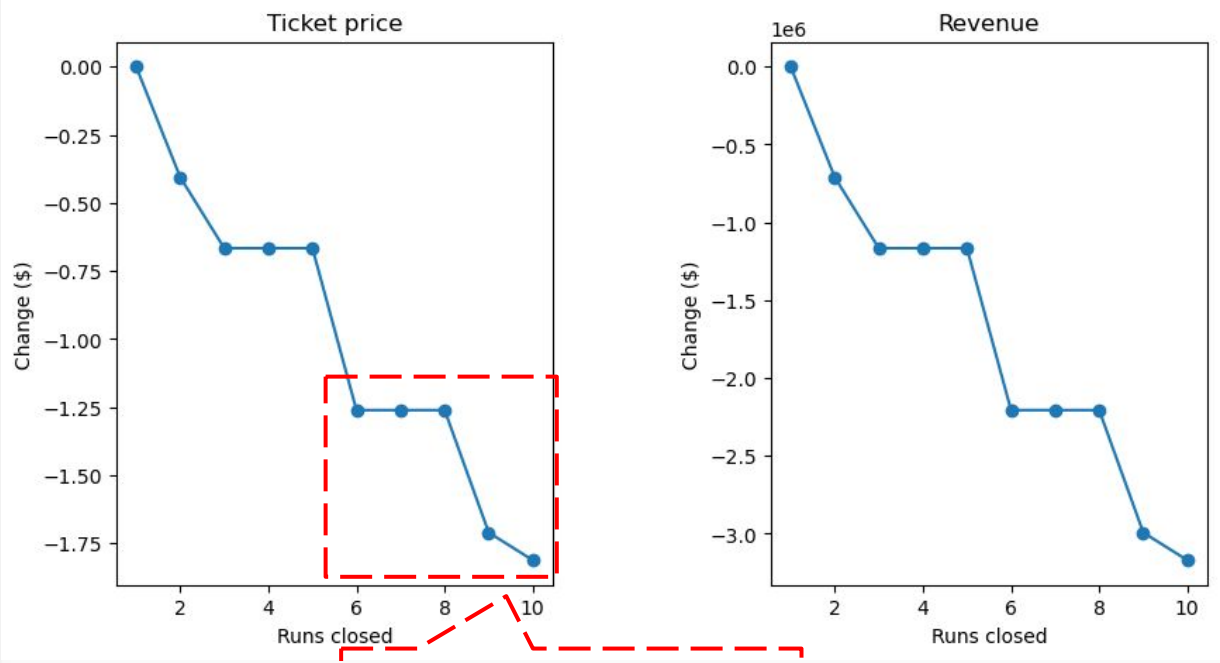
# Scenario 1: Run Closure

- Simulated closure of 10 least-used runs

Results:

- Must close 4+ runs to see any significant impact on revenue
- However, more substantial closures (6+ runs) likely to force drop in ticket price, therefore drop in revenue

Recommendation: Do NOT execute

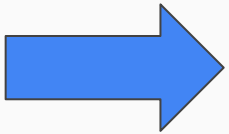


# Scenario 2: New Ski Run (No Snow Making Expansion)



## Approach

- Modeled addition of a new ski run
- Increase vertical drop by 150 feet
- Requires installation of a new chairlift



## Results

- Supports $2 ticket price increase
- Potential seasonal revenue gain of $3,474,638

# Summary & Conclusion



## Summary

**Considering the potential revenue gains from the new ski run and snowmaking expansion, along with the limited impact of closing less-used runs, it seems more favorable to pursue the new ski run and snowmaking expansion with ticket price increase of $2.**

## Conclusion

**Additional Considerations:** Cost vs. Benefit: Not mentioned in the data is the cost of building the new chairlift and expanding snowmaking. Leadership will need to weigh the projected revenue gain against the investment cost.

**Long-term Impact:** While both the new run and snowmaking could increase revenue, must consider the long-term impact. Will the new run attract enough skiers over time to justify the cost? Will a small expansion of snowmaking be sufficient in future years?

**Alternatives:** Are there alternative ways to improve revenue other than change in ticket price that haven't been explored?

**Next Steps/Future Scope of Work:** While the data suggests new ski run and snowmaking expansion might be promising, leadership should conduct a full cost-benefit analysis before making a final decision. Additionally, exploring other revenue-generating strategies might be beneficial.