

Big Mountain Resort



What changes can be made this season to offset the \$1,540,000 cost of a new lift by cutting operational costs without undermining ticket pricing, or by improving features to support a higher ticket price?

Proposed Options & Projected Results:

Option 1:

- Permanently closing up to 10 of the least used runs.
- This doesn't impact any other resort statistics.

Option 2: (recommended)

- Increase vertical drop (add a run to a point 150 feet lower down)
- Requires the installation of an additional chair lift
- ***No additional snow making coverage***

Option 3:

- Increase vertical drop (add a run to a point 150 feet lower down)
- Requires the installation of an additional chair lift
- ***Add 2 additional acres of snowmaking coverage***

Option 4:

- Increase the longest run by 0.2 mile to boast 3.5 miles length
- Add 4 acres of snowmaking coverage

Feature Isolation Process:

State-Specific Effect: Inconclusive

- Population, total area, resort density per 100,000 capita, and resort density per 100,000 square miles were analyzed with no direct correlation with price.
- Top features correlated with all states' ticket pricing were fast quads, runs, snowmaking acres, total chairs, night skiing, and vertical drop.

Key Features Affecting Price:

- Fast quads were nearly unprofitable unless the resort had a large acreage, then minimal fast quads were sufficient
- The correlation of total chairs and runs had a negative impact on ticket prices
- Snowmaking acres may drive up ticket pricing due to guaranteed snow
- Night skiing was closely correlated with areas with a high population density, unlike Montana

PCA Modeling with Forest Regression and Cross Validation:

Modeled Ticket Price:

The model suggested a ticket price increase from \$81 to \$95.87

This would be risky, because the modeled price is based solely on the statewide average ticket price, not on market competition features.

Feature Ranking:

Big Mountain ranks on the upper end for each of the statewide market competition features comparisons.

However, Big Mountain is not the highest ranking in any of the market competition features.

Market Competition Features:

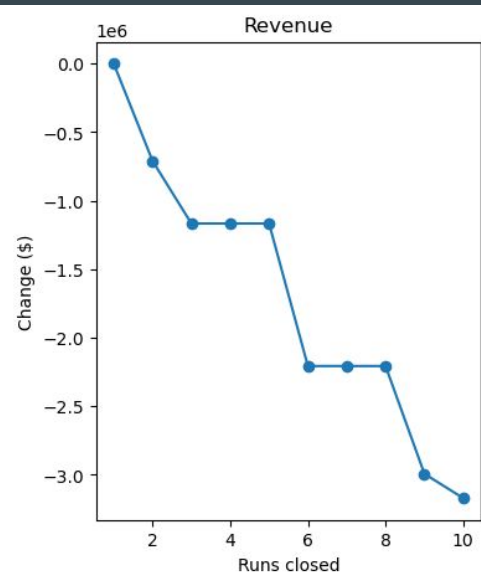
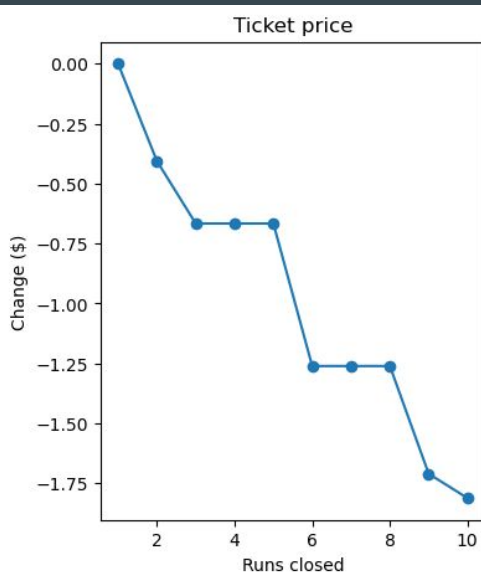
- Vertical drop
- Snowmaking area
- Total chairs
- Fast quads
- Runs
- Longest run (miles)
- Trams
- Skiable Terrain (acres)

Business Leaders Isolated Options:

Option 1:

- Permanently closing up to 10 of the least used runs.
- This doesn't impact any other resort statistics.

- Negative effect on goal of offsetting the cost of a new lift
- Closing runs decreases revenue from ticket sales



Business Leaders Isolated Options:

Option 2: (recommended)

- Increase vertical drop (add a run to a point 150 feet lower down)
 - Requires the installation of an additional chair lift
 - ***No additional snow making coverage***
- This scenario supports an increase in ticket pricing by \$1.99 per ticket
 - *Ticket prices would increase from \$81 to \$82.99 per ticket*
 - *Feature-based price increase is more reasonable than the statewide average price increase to \$95.87*
 - Over the season, this could be expected to amount to an additional revenue of \$3,474,638
 - *The expected additional revenue is more than double the revenue needed to offset the cost of a new lift.*

Option 3:

- Increase vertical drop (add a run to a point 150 feet lower down)
 - Requires the installation of an additional chair lift
 - ***Add 2 additional acres of snowmaking coverage***
- Supports same ticket price increase and additional revenue as Option 2
 - Increasing the snowmaking coverage would also increase operational costs, making this option less profitable than Option 2

Business Leaders Isolated Options:

Option 4:

- Increase the longest run by 0.2 mile to boast 3.5 miles length
 - Add 4 acres of snowmaking coverage
- This scenario supports an increase in ticket pricing by \$1.99 per ticket
 - *Ticket prices would increase from \$81 to \$82.99 per ticket*
 - *Feature-based price increase is more reasonable than the statewide average price increase to \$95.87*
 - Over the season, this could be expected to amount to an additional revenue of \$3,474,638
 - *The expected additional revenue is more than double the revenue needed to offset the cost of a new lift.*

Final Recommendation:

Option 2

- Increase vertical drop
(add a run to a point 150 feet lower down)
- Requires the installation of an additional chair lift
- No additional snow making coverage
- Increases ticket prices by \$1.99 each
(from \$81/ticket to \$82.99/ticket)
- Results in \$3,474,638 of additional revenue this season

Further Considerations:

- Compare decreased operational cost, not just ticket price and revenue decrease, caused by Option 1
 - Determine operational cost of creating Option 2's new trail
 - Compare increase operational cost of Option 2, not just increased ticket price and revenue
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