Big Mountain Resort Analysis and Findings

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Problem Statement Worksheet (Hypothesis Formation)

How can Big Mountain Resort adjust their current ticket pricing of $81 and either mitigate or increase operating costs to increase revenue by a minimum of $1.5M within the upcoming projected ski season of 124 days.

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1 Context

Comparatively, BMR charges a premium in their ticket pricing, failing to acknowledge the facilities responsible for attracting customers. Identifying a relationship can allow BMR to further invest in the amenities that appeal to customers while simultaneously modifying ticket pricing and reducing expenses to increase overall profitability.

2 Criteria for success

By either reducing expenditures by shutting down services that are underutilized, or by investing in ones that draw customers and increasing ticket prices to offset costs, success is determined by a minimum increase in revenue of $1.5M within 124 days.

3 Scope of solution space

There are characteristics specific to BMR that drives customers to choose their location over the competition's. Establishment of a terrain based relationship can justify development tailored towards their primary customers, while an operational relationship can reduce unnecessary costs.

4 Constraints within solution space

Customers could be driven to choose other resorts due to uncontrollable factors such as mountain height or location.

Development of facilities may require an exorbitant increase in ticket prices.

5 Stakeholders to provide key insight

Director of Operations - Jimmy Blackburn

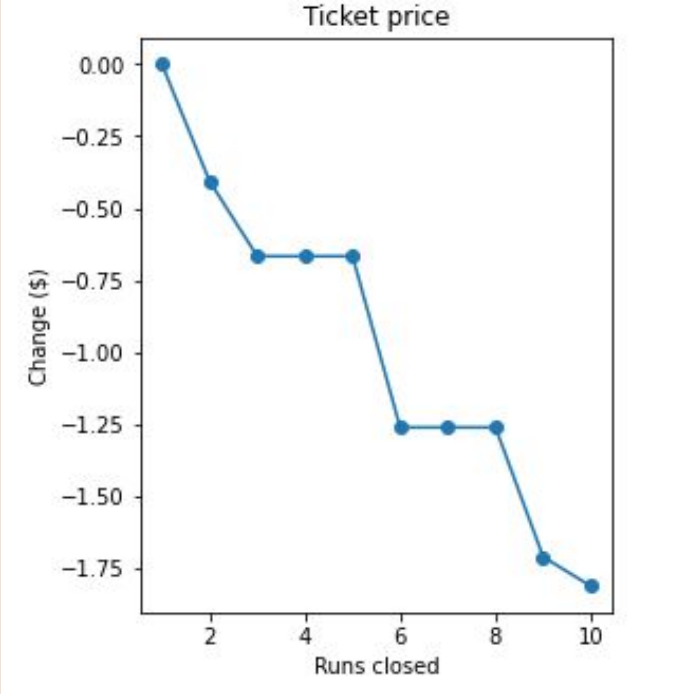
Alesha Eisen - Database Manager

6 Key data sources

Terrain based data - Summit elevation, vertical drop, runs, terrain parks, longest run, skiable terrain, average snowfall

Operational data - Trams, fast eight/sixes/quads, quad/triple/double, total chairs, acres covered by snow making machines

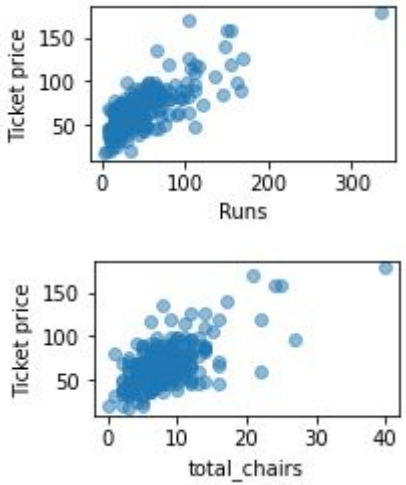
Recommendations and Key Findings

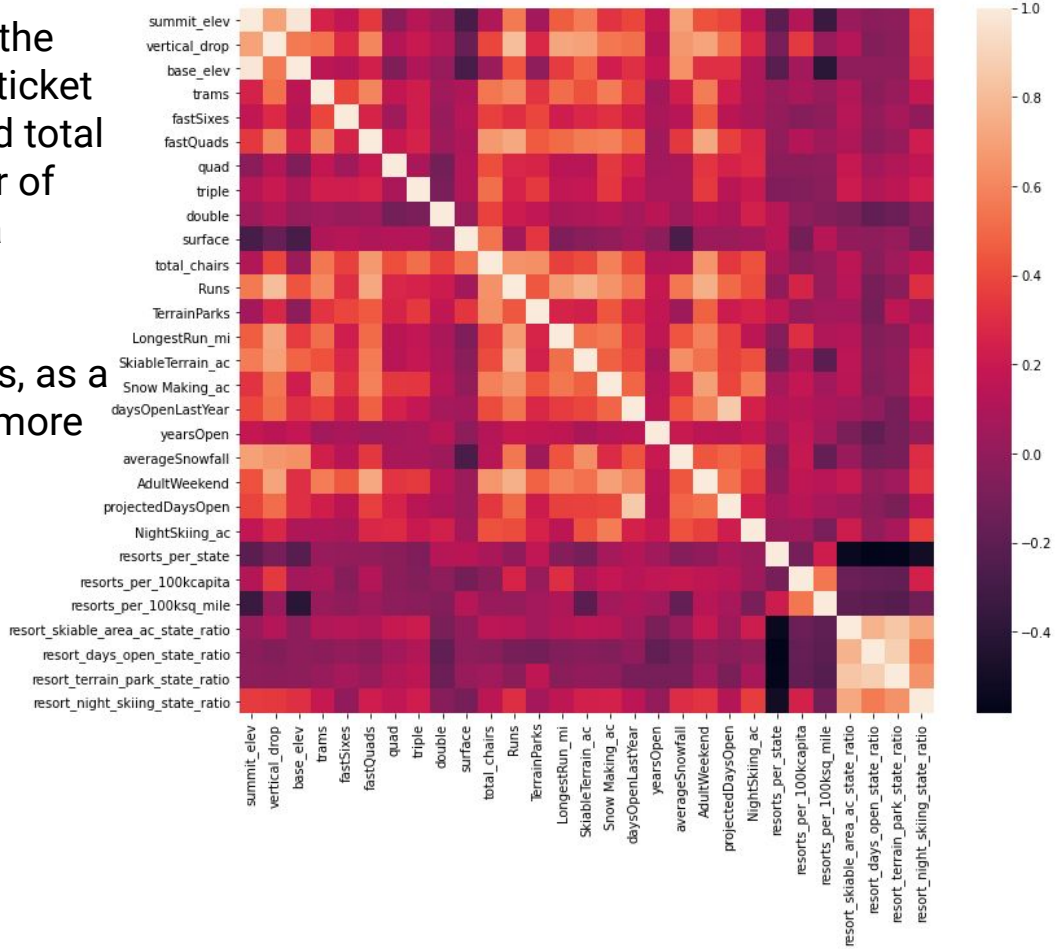


A proposed solution would be to raise the current price of tickets from $81 to $90 and cease operation of 5 out of the 10 least utilized runs. As shown in the graph, the financial repercussions of closing 5 runs is negligible compared to 10, as it only lowers the support for ticket pricing by 75¢ instead of $1.75. Therefore, while a minimum increase to $85 is imperative, a larger increase is justifiable. In combination with the closure of underutilized runs, a decrease in expenditures and increase in revenue is achievable for the upcoming season.

The following heatmap was used to spot the variables with reasonable correlations to ticket pricing. In addition to the vertical drop and total acres of machine made snow, the number of runs, quad lifts, and total chairs showed a discernible relationship.

Zeroing in on this information clarified this, as a resort's price increased when there were more chairs and runs.



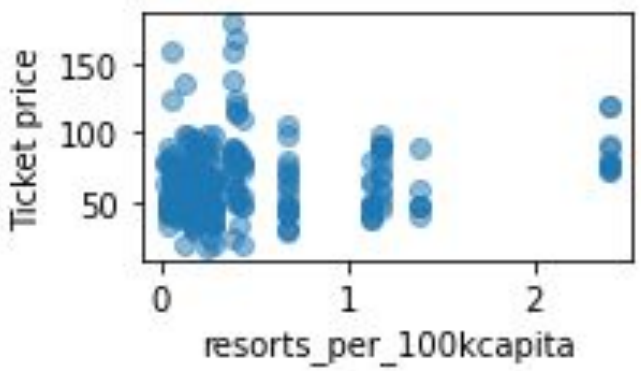


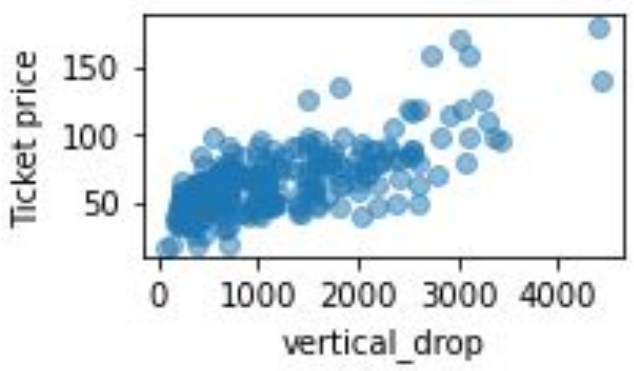
Modeling Results and Analysis

Modeling Results and Analysis cont.

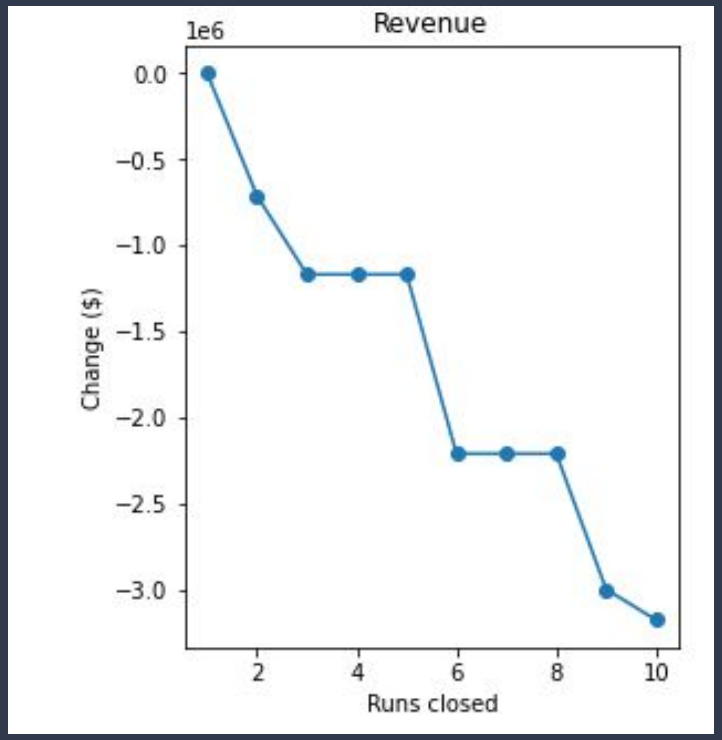
The scatterplot for the total number of resorts per 100,000 people showed a more interesting yet innate correlation since the less resorts there were, the higher the price was. This is likely due to factors related to demand and competition in these areas.

Ultimately, these observations needed to be applied to the client's use case and the features to have the strongest impact on ticket pricing were the vertical drop and acres of snow making.





Modeling Results and Analysis cont.



These 2 features were used in conjunction with 6 others to build a model and discover that at this time, Big Mountain Resort can justify a price increase to $96 a ticket with a $10 margin of error. That is, the current price of $81 can be increased to a minimum of $85 without the need for an increase in operational costs.

The results of the presented scenarios were also taken into consideration, conclusively determining that 2 out of the 4 options had the most viability and perceived impact. A refurbishment of the longest run and increase in the vertical drop would rationalize a greater price increase, but incurs higher operational costs.

Conclusion

In relation to the competition, with the features and amenities Blue Mountain Resort provides, a minimum increase of ticket prices from $81 to $85 is entirely reasonable.

However, a higher price combined with a reduction of operational costs can result in an even larger possibility of an increase in revenue this season.