Big Mountain Resort

Springboard Guided Capstone

Problem Identification

Big Mountain Resort (BMR) expressed a need to reevaluate its current pricing model to increase revenue and traffic to offset this season's anticipated increase in operating costs of $1,540,000 from installing a new chair lift. BMR has considered taking the following actions in order to increase revenue or reduce operating costs:

1. Closing up to 10 lesser-used runs;
2. Increasing the longest run by .2 miles to a total of 3.5 miles. However, this requires increasing snowmaking to cover 4 acres;
3. Increasing the vertical drop by 150', without adding additional snowmaking capabilities. This would, however, require installing an additional chair lift.
4. Increasing the vertical drop and also adding snow-making capabilities. Also, requires the addition of a chairlift.

Key Findings

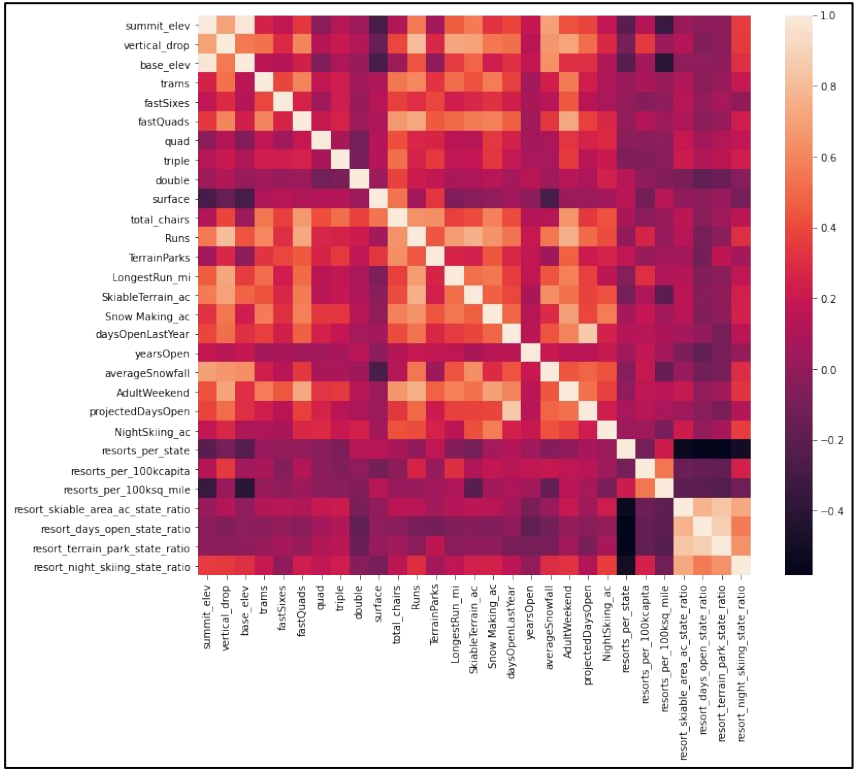
Closing Runs: Big Mountain Resort has a competitive advantage regarding the number of used runs over 90% of the local resorts(Montana only) and 93% of the national resorts. Therefore, closing one run will not impact ticket price or revenue but will reduce operating costs. Closing two or three runs will directly impact revenue without reducing operating costs enough to offset the loss. If closing more than one run is considered by leadership, BMR may as well close four or five runs to decrease operating costs without severely affecting ticket prices. Closing more than six runs would be detrimental to BMRs revenue.

Increasing the Vertical Drop: According to our model, if BMR increases the vertical drop by 150', the Ticket Price will subsequently increase by roughly 10%, from 81.00USD to 89.61USD. This increase will lead to a jump in annual revenue by 15,065,471USD. Increasing the vertical drop will require an additional chair lift, with an estimated operating cost of 1,540,000USD based on this season. Additionally, a new run would be needed and said run would require additional snow making abilities (the cost of installing a run is unavailable).

Modeling Results

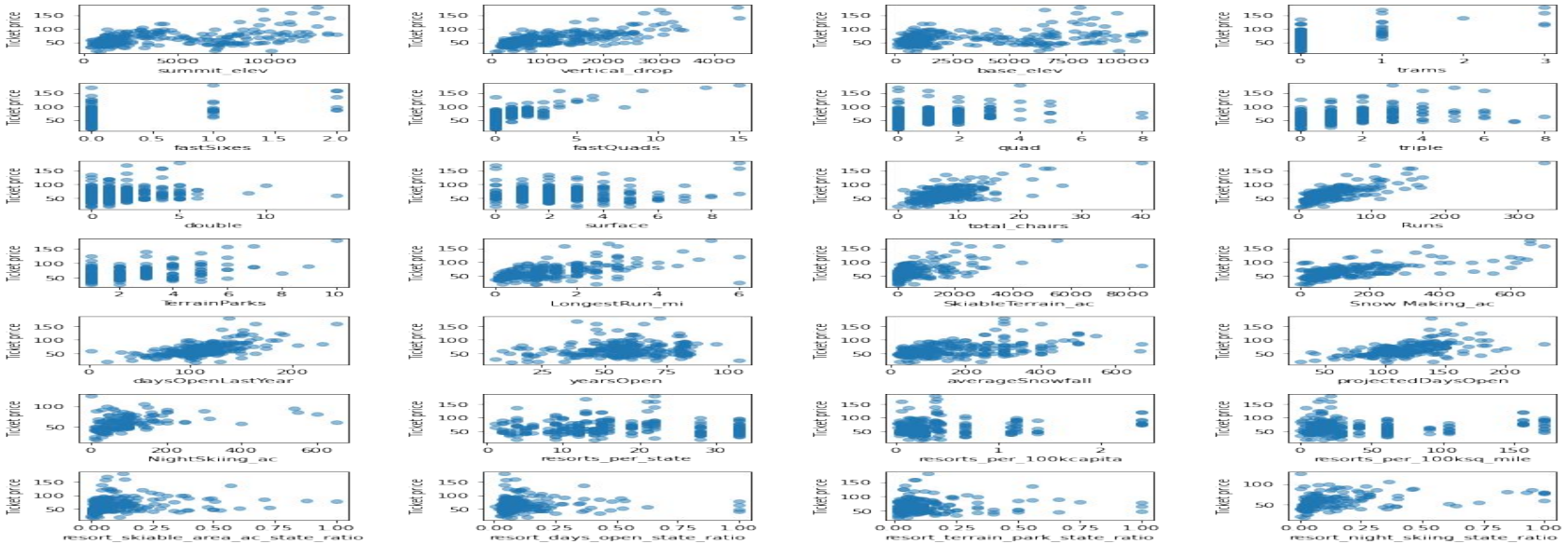
This heat map shows:

- a significant correlation between the summit elevation and base elevation;
- a strong correlation between Adult Weekend ticket price and the vertical drop, the average snowmaking, the fastQuads, the number of runs, and the total number of chairs;
- a strong correlation between the skiable terrain and the number of runs;
- a very strong correlation between predicted days open and the number of days open last year.



Modeling Results

Further analysis of the data through correlation scatter plots shown here confirms a strong positive correlation between the Adult Weekend ticket price and the vertical drop. The information gained from the fastQuads, as well as the number of runs and total chairs, is also quite useful in indicating how quickly and easily a resort can move its skiers and snowboarders around.



Recommendations

It is recommended for BMR to increase the vertical drop, add an additional chair lift, add an additional run and increase the snow making coverage for roughly 2 acres. At this time, it is not recommended BMR close runs due to lack of sufficient data.