
Big Mountain Ski Resort Capstone

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Problem Statement

Big Mountain Resort installed a new lift that has increased their operating costs by \$1,540,000 for one season.

Can Big Mountain increase their ticket price to cover the operating costs of the new lift?

Recommendations and Key findings

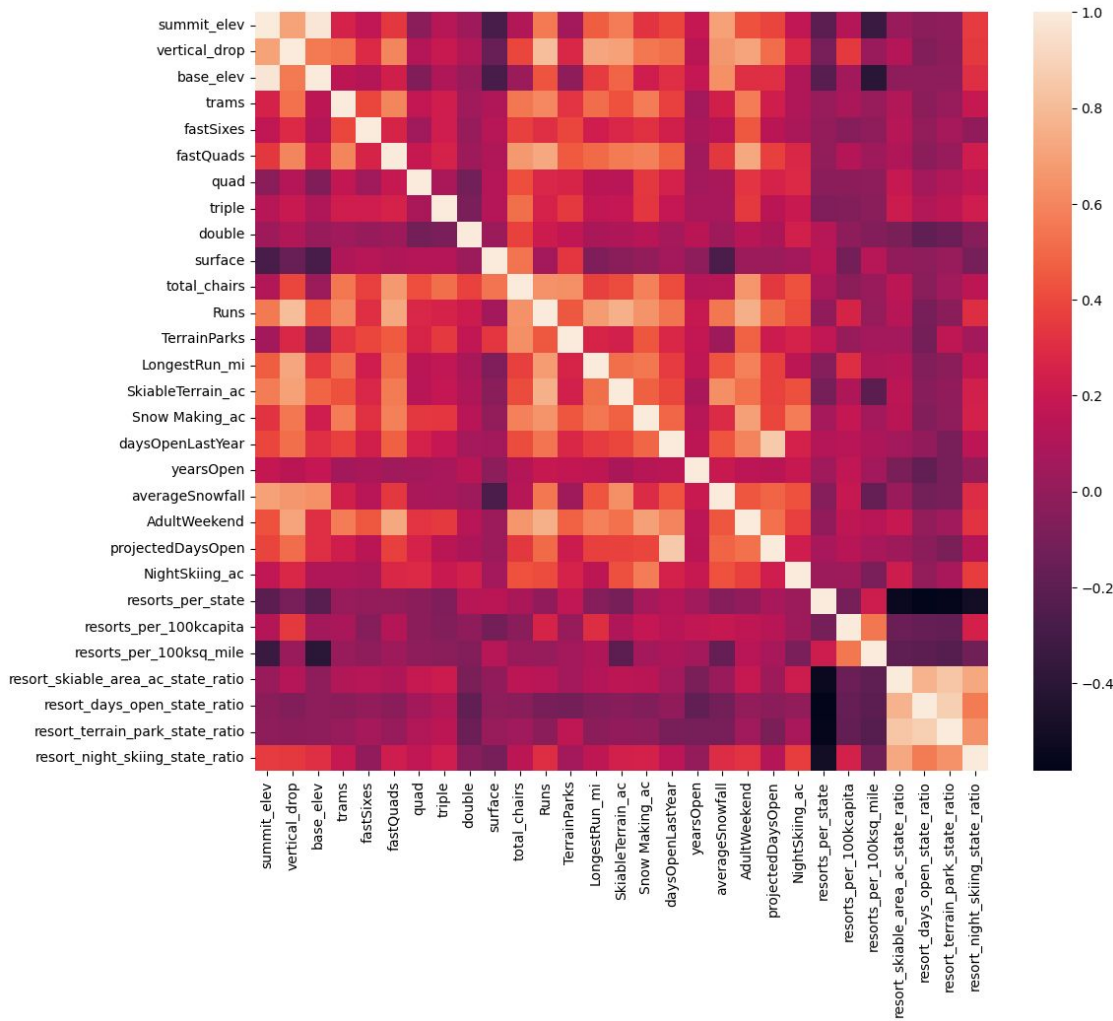
Ticket price is heavily impacted by these primary features: Fast Quads, Runs, Vertical Drop, Total Chairs -All of which Big Mountain has!

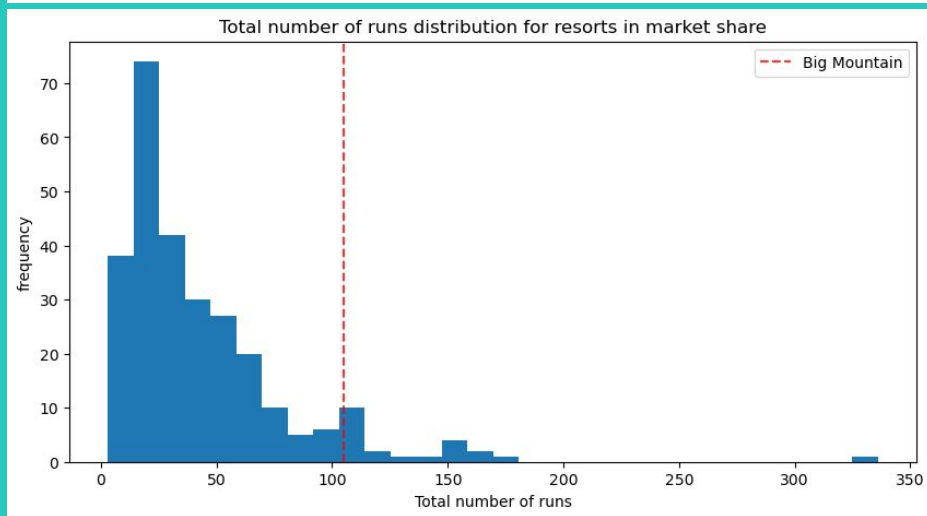
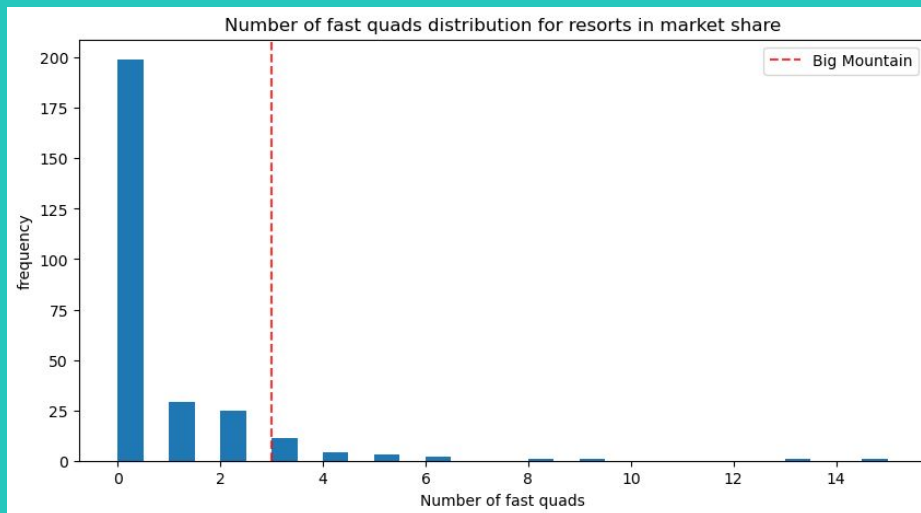
Big Mountain's addition of the new chair lift and operating costs could be supported by increasing the ticket price by \$11.16.

Adding a single run (associated with that chairlift) would give the mountain more than 150 feet of vertical drop and would mostly be a one-time cost only.

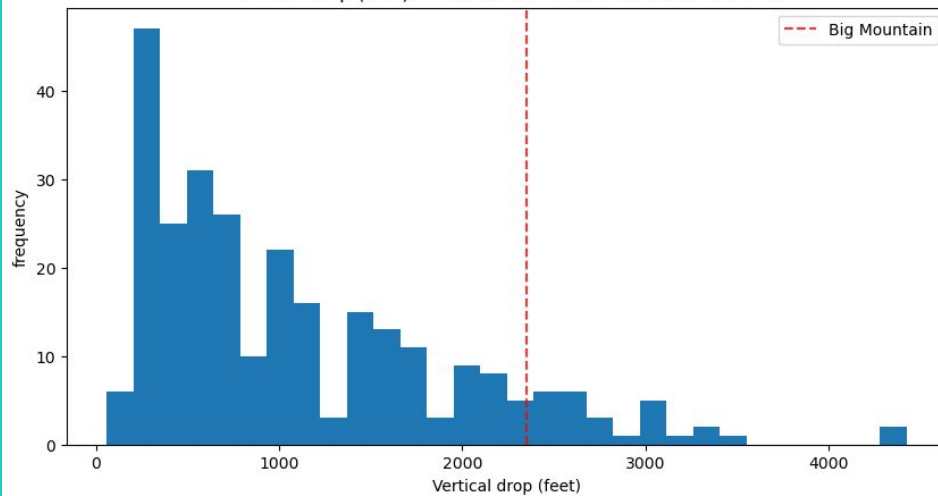
Heatmap of Correlations

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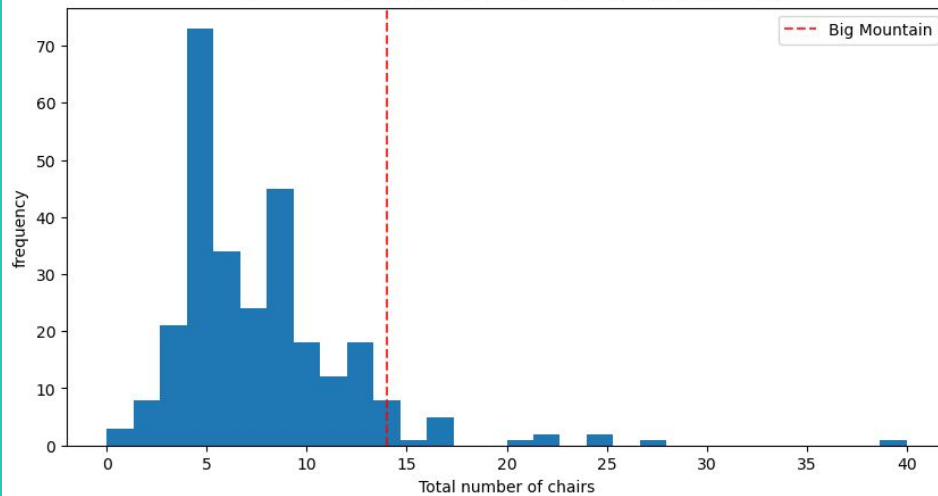




Vertical drop (feet) distribution for resorts in market share



Total number of chairs distribution for resorts in market share



Modeling Scenarios

1. Permanently closing down up to 10 of the least used runs. This doesn't impact any other resort statistics.
2. Increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage
3. Same as number 2, but adding 2 acres of snow making cover
4. Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres

Conclusion

The best model here is Scenario 2 as Scenario 3 included increasing snow making (with associated cost) but yielded no further gain in ticket price. In Scenario 2 we are only real operating expense that is increasing is that which is associated with running 1 more chair lift. Adding a single run (associated with that chairlift) would give the mountain more than 150 feet of vertical drop and would mostly be a one-time cost only.