Big Mountain Resort

Springboard Guided Capstone Project

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Problem Identification

1 Context

Big Mountain Resort has recently added chair lift - in addition to already existing 11 lifts, 2 T-bars, and 1 magic carpet - which has increased their operating costs by $1,540,000 this season. Their pricing is based on a premium over the average price of other resorts in their market segment. They're interested in either increasing ticket prices or reducing operating costs by evaluating the worth of different facilities they have in operation and adjusting price accordingly.

2 Criteria for success

Discover the impact of the various facilities on ticket price. Highlight which of the Big Mountain facilities are under or over performing their expected price effect. Finally, offer a preliminary estimate for market adjusted ticket prices.

3 Scope of solution space

Analysis will focus exclusively on existing facilities and amenities. The analysis will not propose the removal of or addition of new facilities or amenities. The analysis will also not consider or suggest new business models, services, or methods.

4 Constraints within solution space

-New pricing scheme may be met with resistance by employees and customers
-Many factors outside the scope of this analysis may influence overall ticket price (reputation, marketing, etc.)
-Many of the largest price influences may be outside the control of the business to change (snowfall, location, etc.)

5 Stakeholders to provide key insight

-Jimmy Blackburn - Director of Operations, Big Mountain Resort

-Alesha Eisen - Database Manager, Big Mountain Resort

6 Key data sources

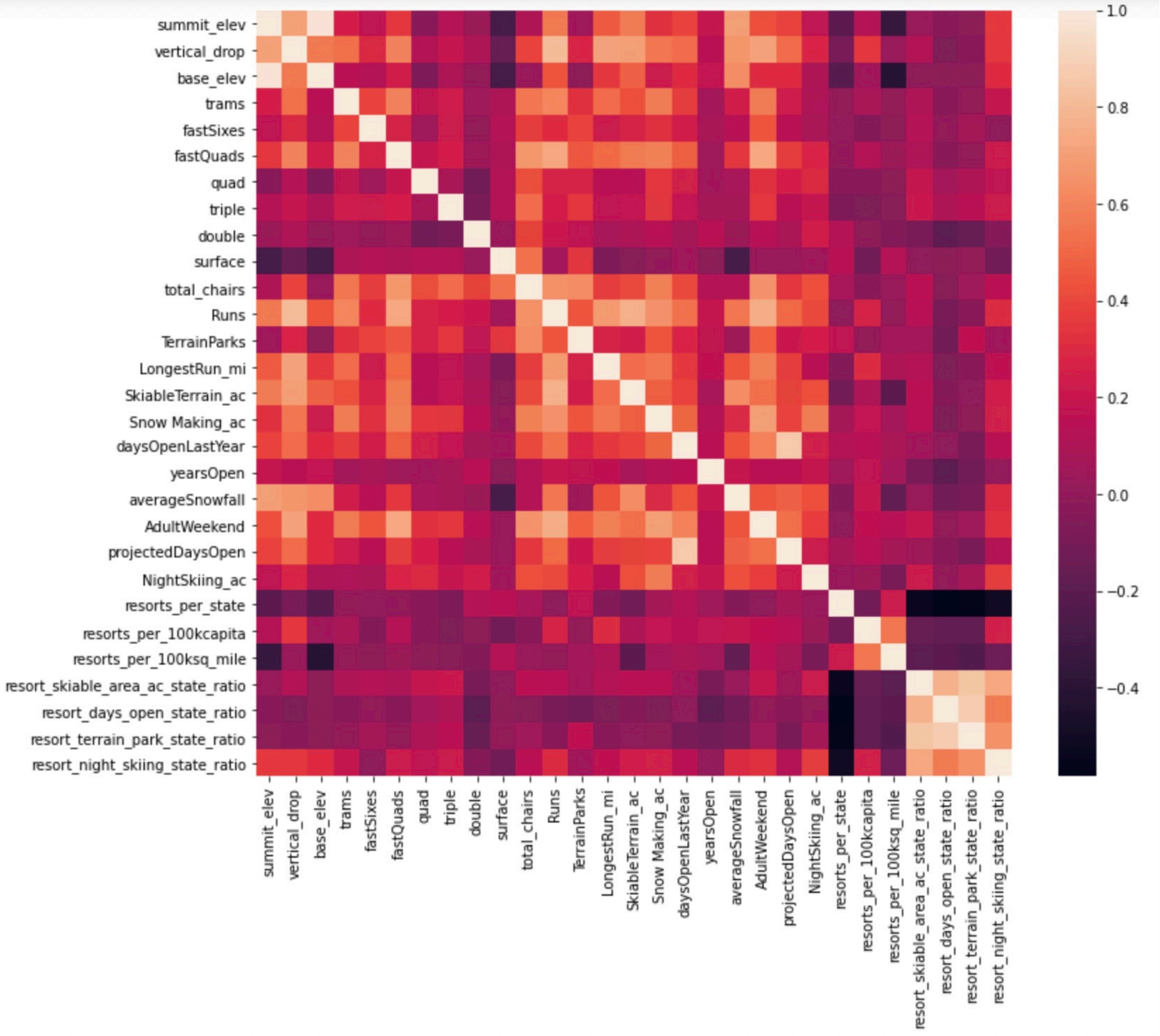
CSV of similar resorts and their facilities, provided by Alesha Eisen

Recommendations

- Increase the vertical drop by adding a run to a point 150ft lower
- Consider adding 2 acres of snow making coverage to the new lower drop

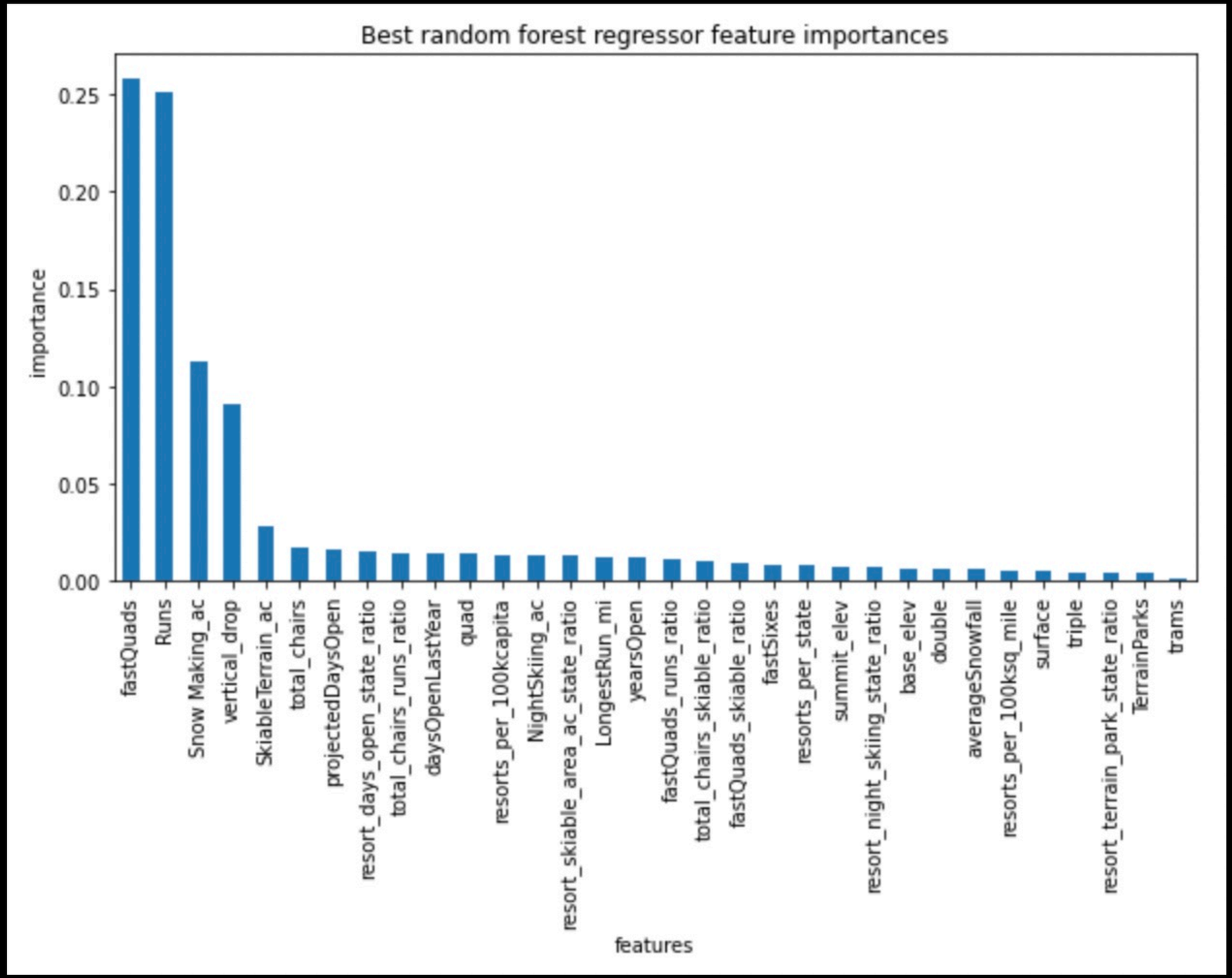
Modeling

Heat-map of considered features



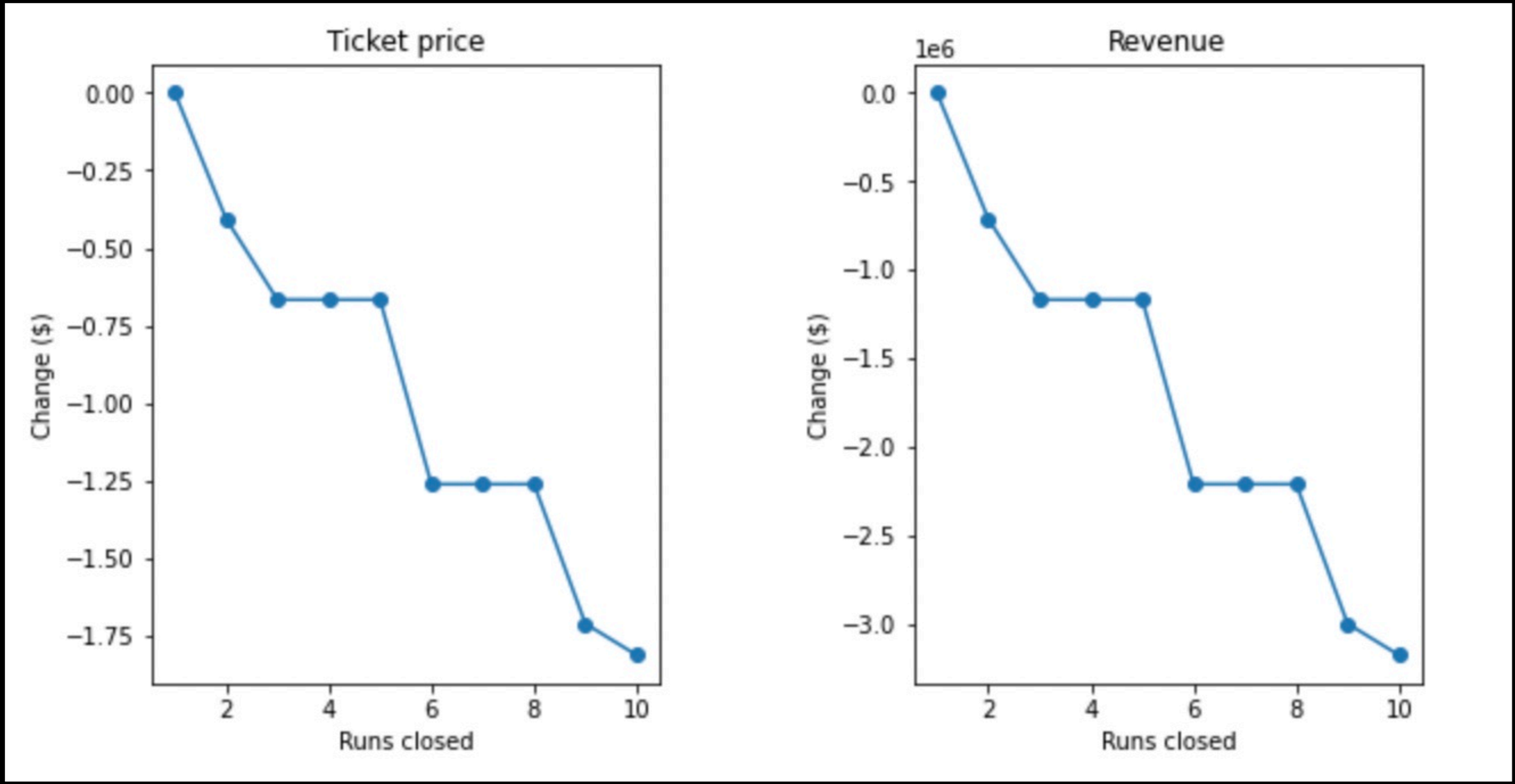
Modeling

Relative feature importance on price



Modeling

Effects of closing runs on supported ticket price and revenue



Summary

Of the four positions considered:

1. Closing the first two runs reduce ticket price and revenue considerably. However, the 3rd, 4th and 5th runs closed do not have a large impact. If closing more than two runs for cost savings, the marginal effect on prices up to five runs is negligible.

2. Increasing the vertical drop 150ft and adding an additional chair lift with no additional snow coverage supports an $8.61 increase in ticket prices.

3. Doing the above and adding 2 acres of snow cover supports a total $9.90 increase in ticket prices.

4. Increasing the longest run by 0.2 miles supported no increase in ticket price.