

Big Mountain

Price strategy evaluation



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01.

THE PROBLEM





\$1.54M additional operating cost this season
from recent investment in chair lift

“To what extent is Big Mountain capitalizing on its facilities through pricing? ”

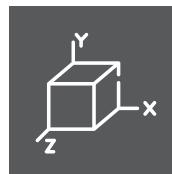
“Given competitor pricing, how much can Big Mountain charge for its tickets?”

OBJECTIVES & SCOPE

SCOPE & LIMITATIONS

Predictive modelling will be based solely on data provided (various resort parameters outlined in the Appendix). Due to missing data, only adult weekend prices will be modelled.

The approach assumes that all other resorts are largely setting prices based on how much people value certain facilities.



UNCOVERING INSIGHTS

To provide an insight into how important some facilities are compared to others

PREDICTIVE ANALYTICS

Guidance on how to charge customers for the value provided through facilities

SCENARIO MODELLING

To evaluate how various initiatives may affect ticket pricing

02.

RECOMMENDATIONS



1. SETTING PRICES

Analysis suggests Big Mountain's ticket prices are underpriced at \$81.

As it provides more facilities than competitors in the Montana and even throughout the country, the model supports a price of \$95.87 (+/- \$10.39), positioning Big Mountain at the higher end of the market.

Hence, this suggests the need to **adjust ticket prices** to reflect the resort's premium offering.



2. EVALUATING THE INITIATIVES

	Scenarios	Findings	Recommendation
1	Close down up to 10 of the least used runs	Closing 1 run makes no difference Closing 4 or 5 runs will have the same effect as closing 3	Investigate option to close 1 or 5 runs
2	Increase vertical drop (add a run to 150ft lower), add a chair lift	Supports a price increase of \$1.99, resulting into c. \$3.5m over the season	Investigate profitability of initiative by gathering corresponding costs
3	As above, and add 2 acres of snow	Adding two acres of snow does not provide additional price lift	Not recommended
4	Increase longest run by 0.2mi, add 4 acres of snow	No price difference predicted from initiative	Not recommended

03.

RESULTS & ANALYSIS



MOST VALUED FACILITIES

Rated most relevant by both models:



Fast four-person chairs



Runs on the resort



Chairlifts



Area covered by snow-making machines



Vertical drop (summit to base)



Skiable area

LR predicts a negative relationship to price – TBD

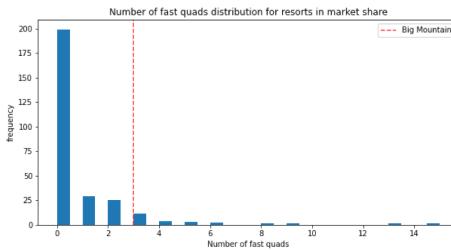


Length of longest run

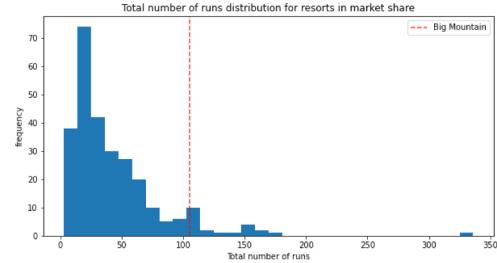
Whilst one of the more important features in LR, this is less important for the RF.

PERFORMANCE AGAINST COMPETITORS

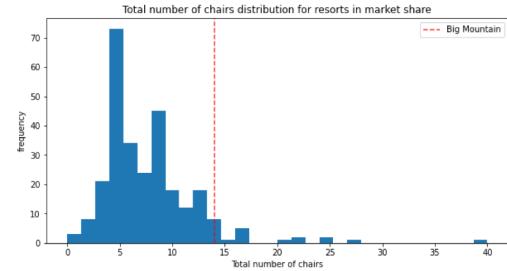
Fast 4-person chairs



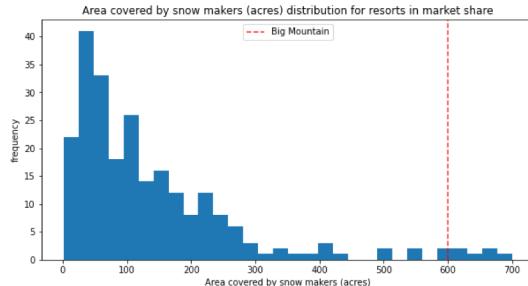
Runs on the resort



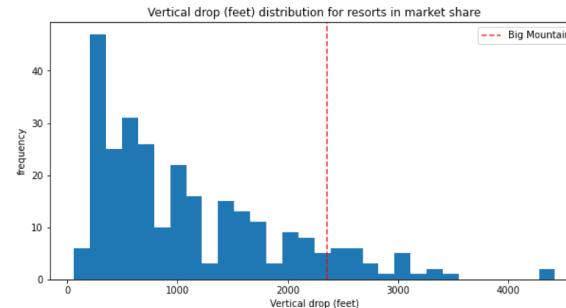
Chairlifts



Area covered by snow-making machines

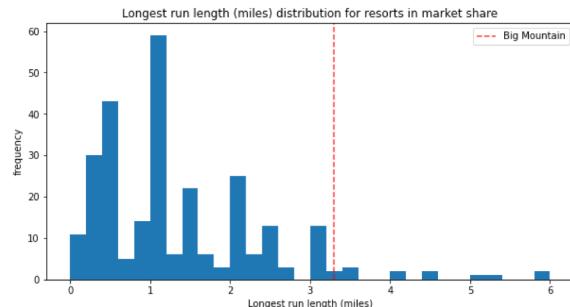


Vertical drop (summit to base)

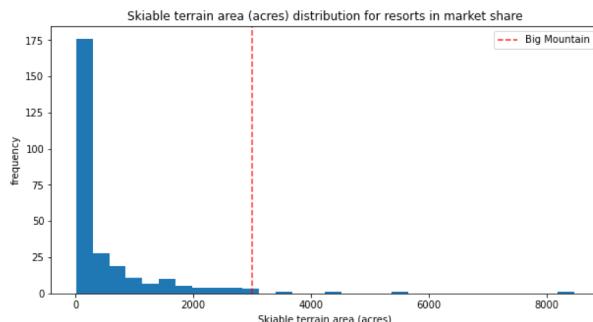


PERFORMANCE AGAINST COMPETITORS

Length of longest run



Skiable Terrain



In all the most predictive features, Big Mountain has clearly outperformed competition for the facilities it provides, suggesting support for a premium pricing.

LEVEL OF CONFIDENCE IN ESTIMATES:

*Mean Absolute
Error*

Linear Regression

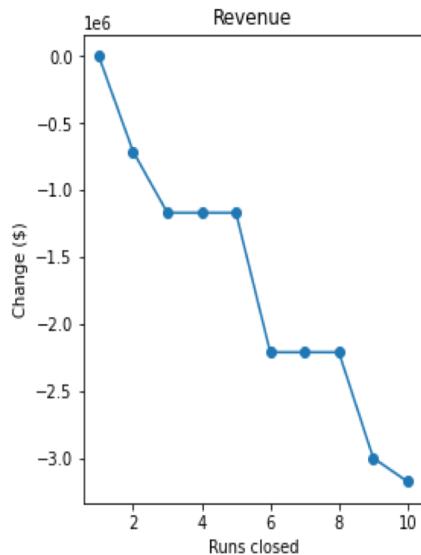
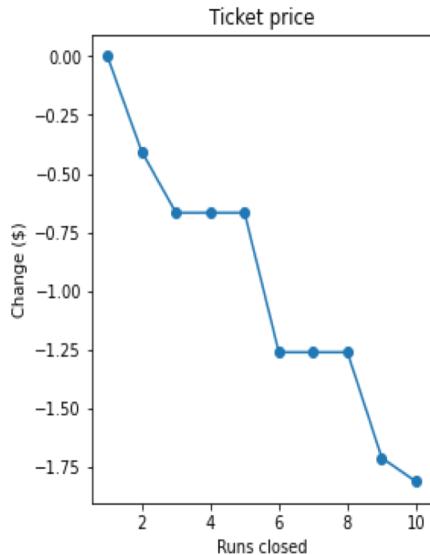
\$11.79

Random Forest

\$9.54

Preferred
model

DISCUSSING SCENARIO 1



Closing one run makes no difference.

However, closing 2 and 3 successively reduces support for ticket price.

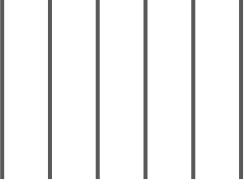
If Big Mountain closes down 3 runs, it seems they may as well close down 4 or 5 as there's no further loss in ticket price.

Increasing the closures down to 6 or more leads to a large drop.

04.

CONCLUSION





+8-35%

ticket price increase supported by the model

This is reflective of the superior offering provided by Big Mountain relative to its competitors.

c. \$3.5m

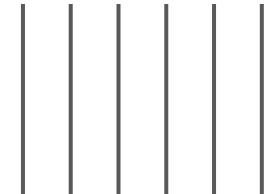
more revenues implementing scenario 2

through a predicted price increase of \$1.99. This entails increasing the vertical drop by add a run to 150ft lower and adding a chair lift.

\$\$\$

potential cost savings from closing runs

Closing 1 run can generate significant cost savings with minimal to no impact on price. Considering price impact, it is more beneficial to close 4 or 5 runs should the business decide to close 3.



SUMMARY & NEXT STEPS

Big Mountain is superior to competitors in terms of facilities but offers tickets which are under-priced relative to its competitors.

Most valued facilities are: fast 4-person chairs, vertical drop, chair lifts and number of runs.

Next steps

- Consider adjusting ticket prices to capture higher value provided to customers
- Consider closing 1 (min-no price impact) or 4-5 runs (price decrease similar to closing 3 runs)
- Supplement findings with other business and qualitative analysis

Potential data to include:

- ✓ Number of tickets or visitors
- ✓ Cost information
- ✓ Geolocation data
- ✓ Adult week

Further analysis

THANKS!



Do you have any questions?



A.

APPENDIX

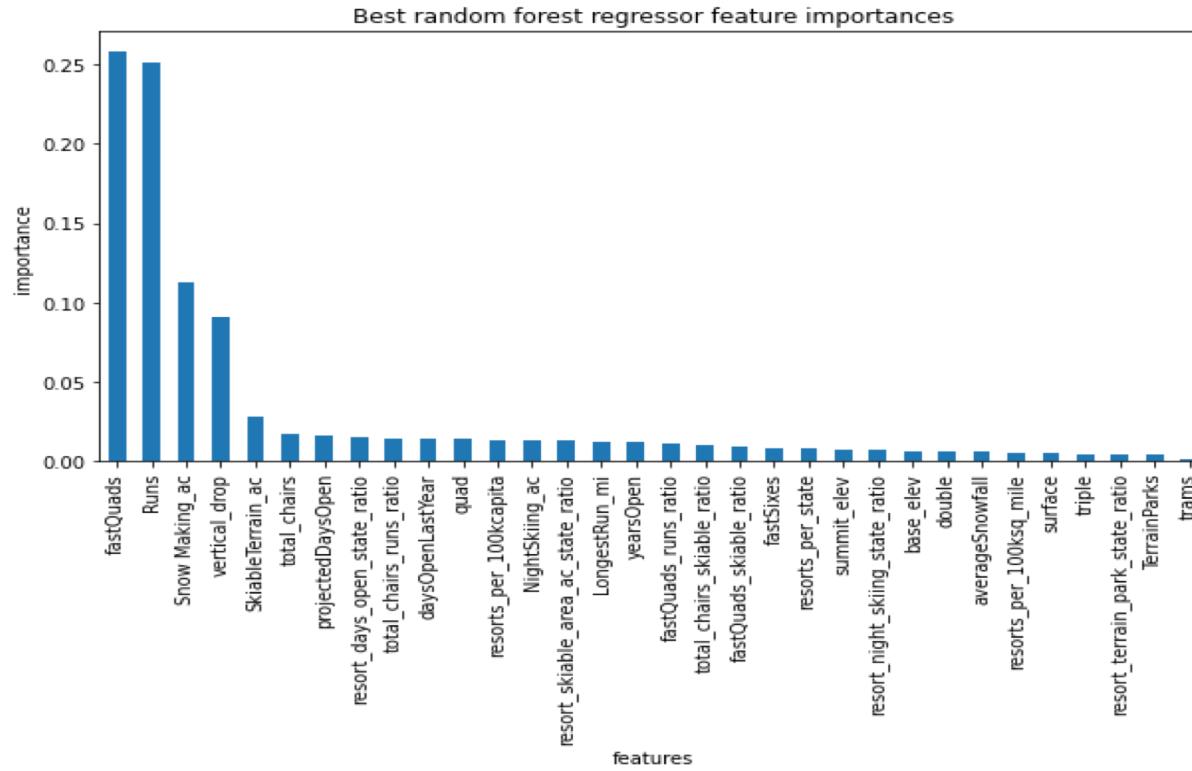
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I. DATA USED

Column	Description
Name	The name of the ski resort.
Region	The region within the United States where the resort is located.
state	The state name where the resort is located.
summit_elev	Elevation in feet of the summit mountain at the resort.
vertical_drop	Vertical change in elevation from the summit to the base in feet.
base_elev	Elevation in feet at the base of the resort.
trams	The number of trams.
fastEight	The number of fast eight person chairs.
fastSixes	The number of fast six person chairs.
fastQuads	The number of fast four person chairs.
quad	Count of regular speed four person chairlifts.
triple	Count of regular speed three person chairlifts.
double	Count of regular speed two person chairlifts.
surface	Count of regular speed single person chairlifts.
total_chairs	Sum of all the chairlifts at the resort.
Runs	Count of the number of runs on the resort.
TerrainParks	Count of the number of terrain parks at the resort.
LongestRun_mi	Length of the longest run in the resort in miles.
SkiableTerrain_ac	Total skiable area in square acres.
Snow_Making_ac	Total area covered by snow making machines in acres.
daysOpenLastYear	Total number of days open last year.
yearsOpen	Total number of years the resort has been open.
averageSnowfall	Average annual snowfall at the resort in inches.
AdultWeekday	Cost of an adult weekday chairlift ticket.
AdultWeekend	Cost of an adult weekend chairlift ticket.
projectedDaysOpen	Projected days open in the upcoming season.
NightSkiing_ac	Total skiable area covered in lights for night skiing.

B. FEATURE IMPORTANCE – RANDOM FOREST





END.