



BIG MOUNTAIN RESORT^o PRICING ANALYSIS





Context

- A chair lift recently installed
- Costs \$1,540,000
- Premium charge preferred

Success Criteria

- Raise ticket price
- Increase revenue
- Cover the costs
- Within 1 year

Constraints

- Insufficient capitalization on facilities

Data Sources

- CSV file from the database manager





Problem Statement

How can Big Mountain Resort select a better value for its ticket price without undermining the ticket price or supporting an even higher ticket price over the year?

e.g.

- Closing runs?
- Reducing the number of fast chairs?
- Making more snows via machines?
- Increase the night skiable area covered by lights?
- Increase the vertical drop?

...



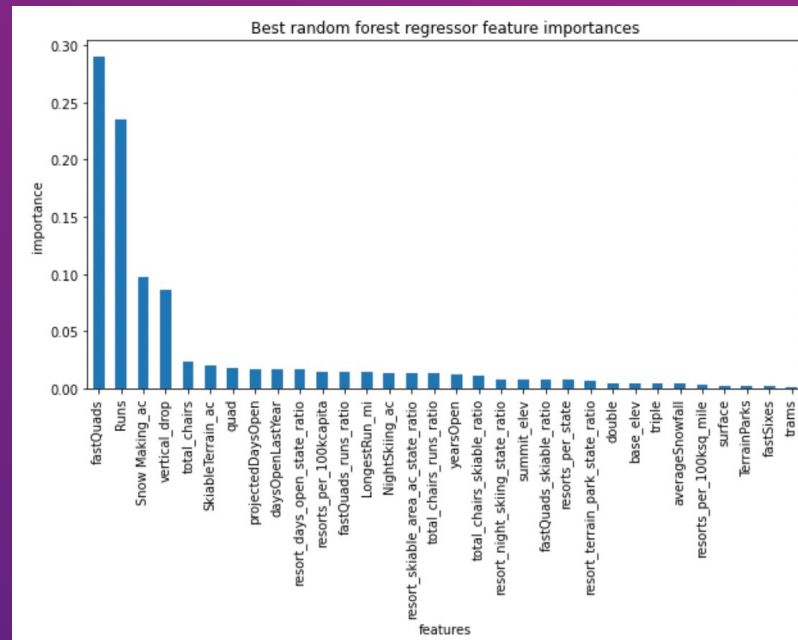
KEY FINDINGS

Based on the model (Random Forest):

- The expected ticket price for Big Mountain is \$98.74
- Current price is \$81.00
- Mean Absolute Error is \$10.30

(*** Adult Weekend Price is our target)

-- > room for increasing price!



Top features:

``fastQuads``, ``Runs``, ``Snow Making_ac``, ``vertical_drop``

RESULTS & ANALYSIS

- 8 features affect pricing mostly (Cross Validation):

vertical_drop	10.767857
Snow Making_ac	6.290074
total_chairs	5.794156
fastQuads	5.745626
Runs	5.370555
LongestRun_mi	0.181814
trams	-4.142024
SkiableTerrain_ac	-5.249780

Lets put Big Mountain in the market context!

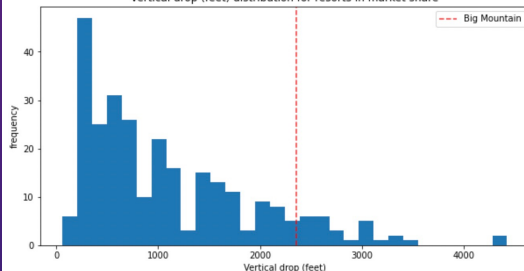
Lets see where Big Mountain sits for some of the top features that are related to AdultWeekend Price!





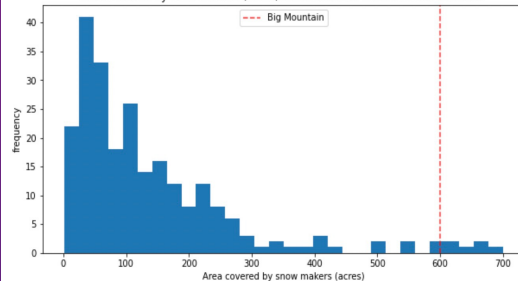
RESULTS & ANALYSIS

Vertical drop (feet) distribution for resorts in market share



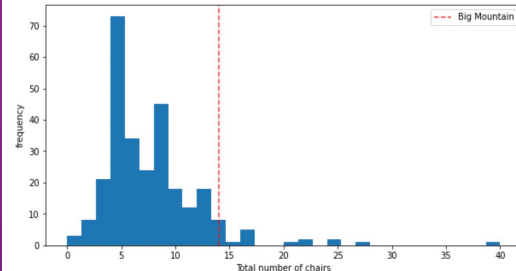
Big Mountain is doing well for vertical drop, but there are still quite a few resorts with a greater drop.

Area covered by snow makers (acres) distribution for resorts in market share



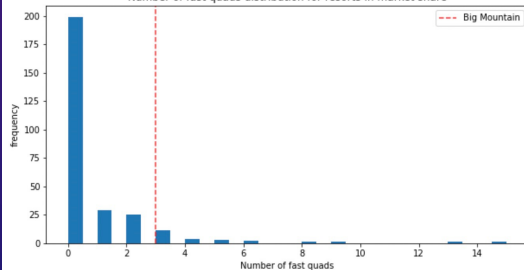
Big Mountain is very high up the league table of snow making area.

Total number of chairs distribution for resorts in market share



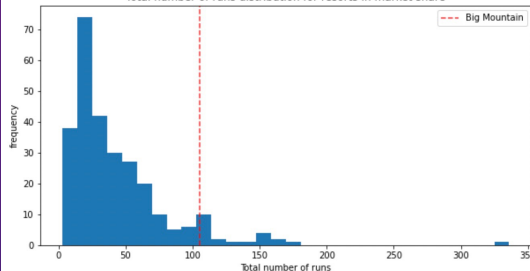
Big Mountain has amongst the highest number of total chairs, resorts with more appear to be outliers.

Number of fast quads distribution for resorts in market share



Most resorts have no fast quads. Big Mountain has 3, which puts it high up that league table. There are some values much higher, but they are rare.

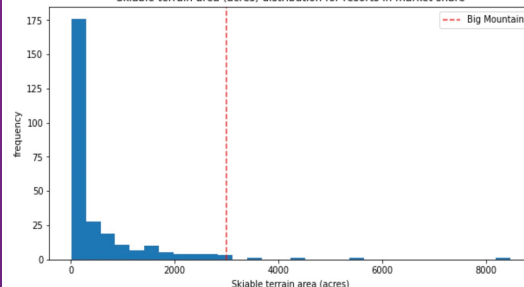
Total number of runs distribution for resorts in market share



double click to hide

Big Mountain compares well for the number of runs. There are some resorts with more, but not many.

Skiable terrain area (acres) distribution for resorts in market share



Big Mountain is amongst the resorts with the largest amount of skiable terrain.



RESULTS & ANALYSIS

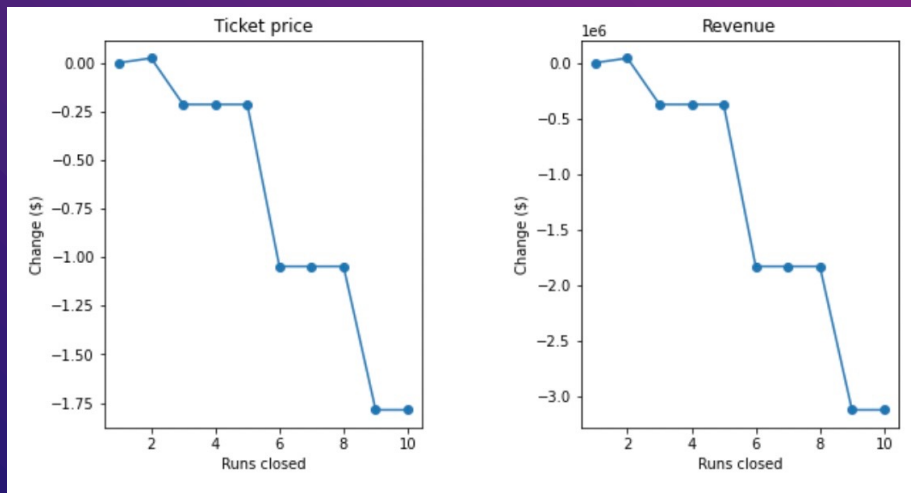
Scenario Analysis:

Scenario	Results
1. Close up to 10 runs	Close 2 runs is optimal
2. Increase vertical drop by adding a run to a point of 150 feet lower down, with an additional chair lift	Increase ticket price support by \$1.88, and revenue by 3.3 million
3. Same as number 2, but adding 2 acres of snow making cover	No difference than number 2
4. Increase the longest run by 0.2 mile and add a snow making coverage of 4 acres	No effect on ticket price and revenue



RESULTS & ANALYSIS

Scenario Analysis (cont.) -- > more on closing runs!




Close one run	No impact
Close 2 runs	Increase support for ticket price and revenue
Close 3, 4 or 5 runs	Same loss in ticket price and revenue
Close 6 or more	Large drop in ticket price and revenue



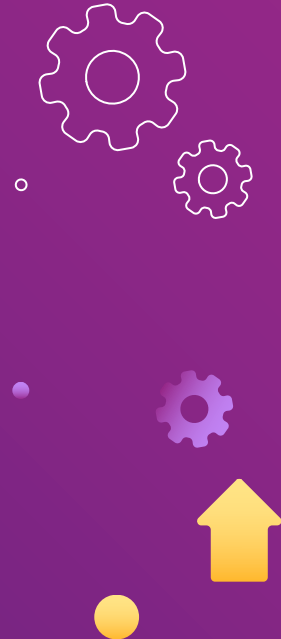
CONCLUSION

Based on the model (will be discussed next), Big Mountain Resort should:

- Start to close 2 least used runs at first
- Increase the vertical drop by adding a run from 150 feet lower down with an additional chair life -- >  \$1.88 in ticket price & 3.3 million in revenue over the season

Secondary options:

- Increase the vertical drop further (e.g., by 200 or 250 feet)
- Close more runs (up to 5)



THANKS!

DO YOU HAVE ANY QUESTIONS?

banqu@buffalo.edu
+1 416 553 2036



CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**

