

# Big Mountain Resort Guided Capstone

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# Problem Identification

Big Mountain Resorts is a ski resort in Montana that allows access to 105 trails and sees approximately 350,000 annual customers. The resort has 11 total lifts, but plans to build a 12th one with an added operating cost of \$1.54 million over the next year. In order to increase revenue, the focus is to cut operating costs while also structuring their pricing scheme based on similar resorts, rather than on market averages.

# Problem Identification

How can Big Mountain Resorts price their tickets to turn a profit and offset the \$1.54 million in additional annual operating costs resulting from their new chair lift?

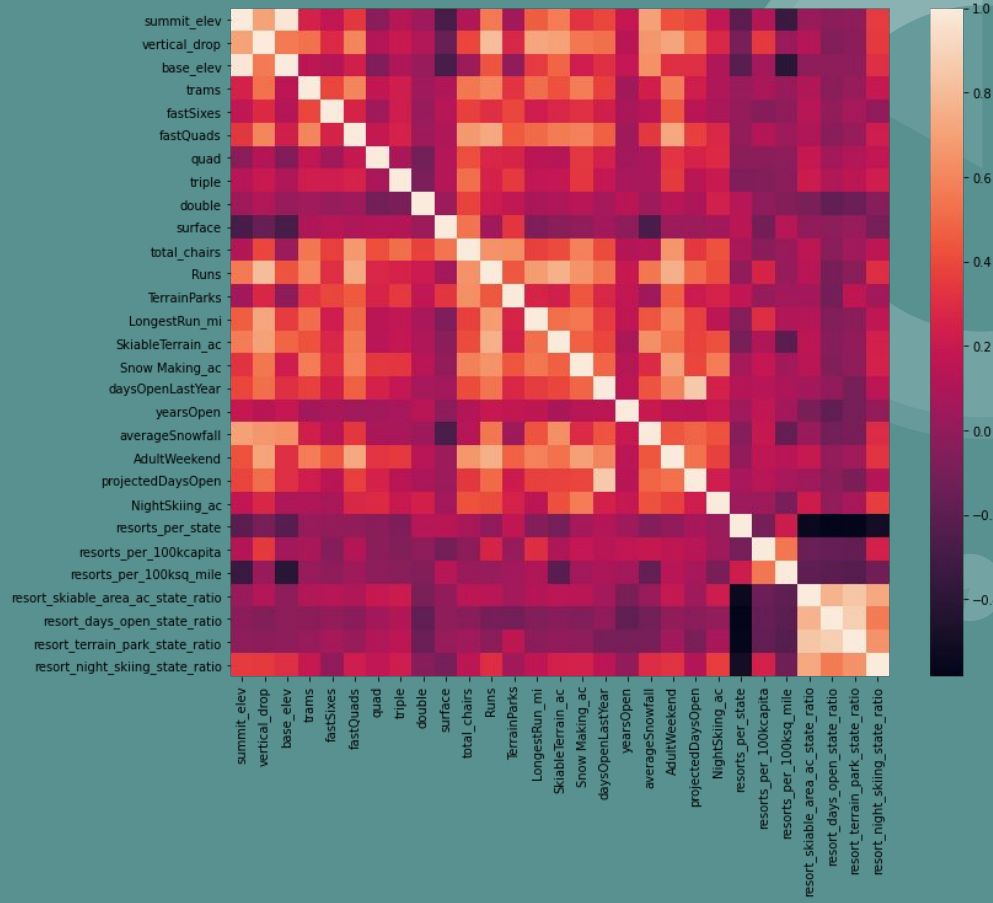
# Recommendations & Key Findings

- Undervalued:
  - Current Ticket Price: \$81.00
- Big Mountain offers many top-tier qualities
  - Fast Quads
  - Snow Making (ac)
  - Runs
  - Vertical Drop
  - Chairs
  - Trams
  - Longest Run (mi)
  - Skiable Terrain (ac)
- Re-Evaluated Price:
  - \$94.22 (+/- \$10.39)

## Recommendations:

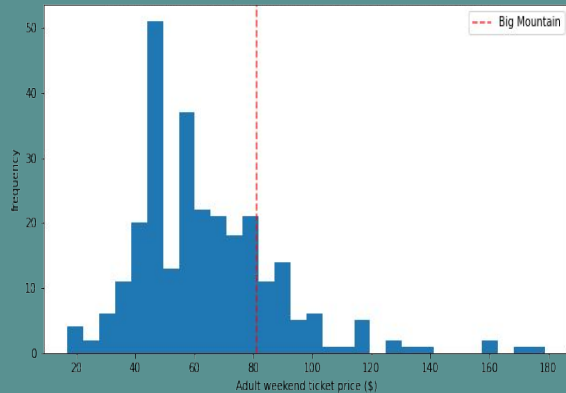
- 1) Close down up to 10 of least-used runs
- 2) Increase vertical drop of a run by 150 ft and add additional chair lift
- 3) Add 150 ft of vertical drop AND add 0.2 acres of snow making coverage
- 4) Increase longest run by 0.2 mi with additional 4 acres of snow making

# Modelling Results & Analysis

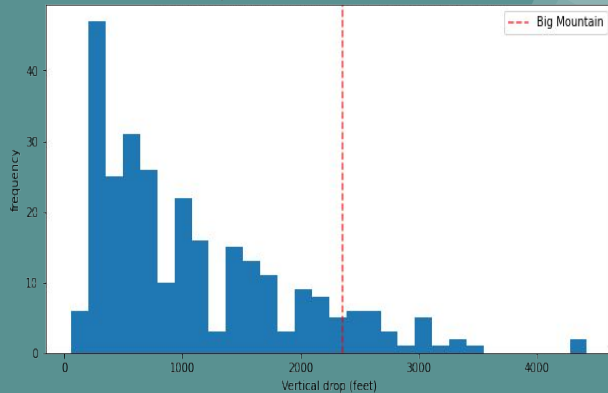


# Modelling Results & Analysis

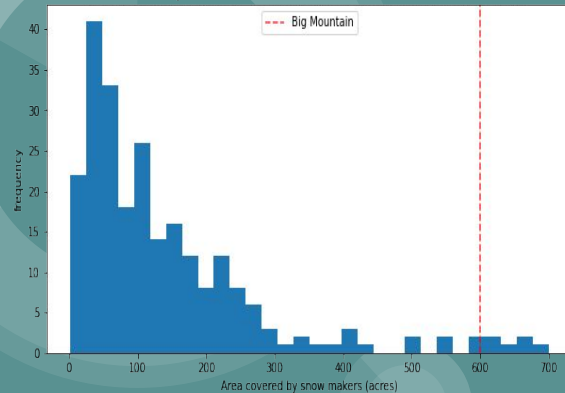
Adult weekend ticket price (\$) distribution for resorts in market share



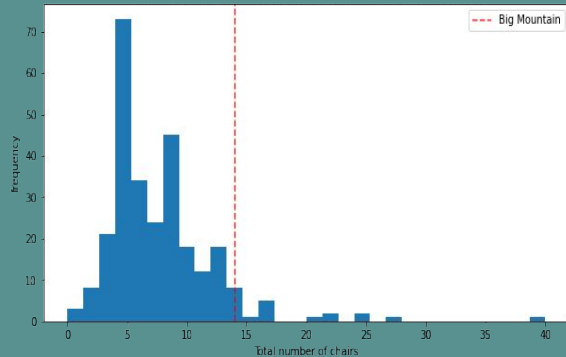
Vertical drop (feet) distribution for resorts in market share



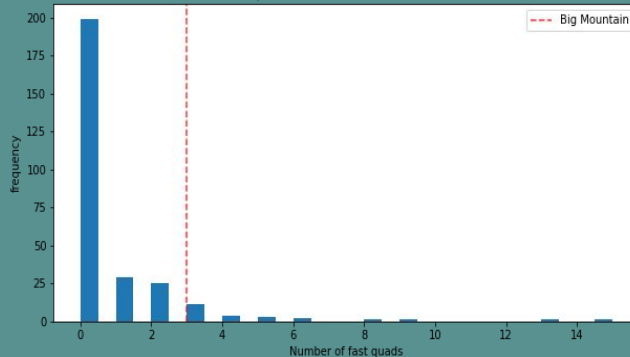
Area covered by snow makers (acres) distribution for resorts in market share



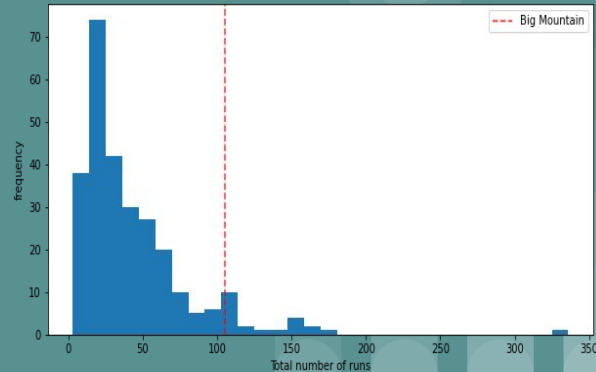
Total number of chairs distribution for resorts in market share



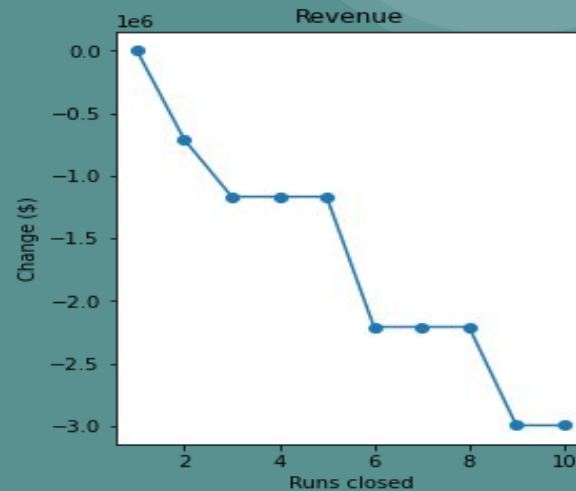
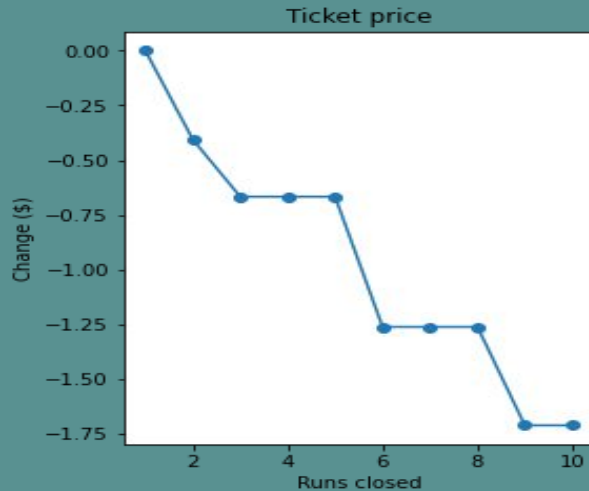
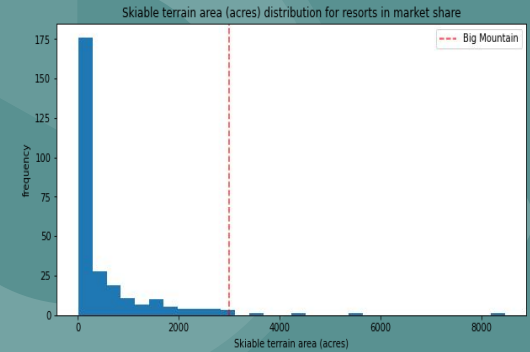
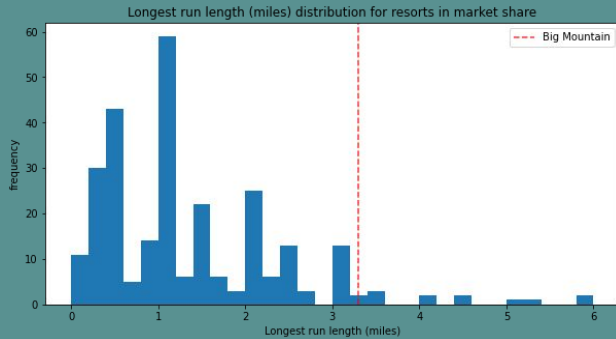
Number of fast quads distribution for resorts in market share



Total number of runs distribution for resorts in market share



# Modelling Results & Analysis



→ see next slide \*\*

# Modelling Results & Analysis

## Recommendations (cont'd):

- **Scenario 1)** Closing one run makes no price change, drop when close 2, no change for 3-5, drop again after 6 (BMR has 105 overall) \*\*
  - Should close between 4-6 of least used runs; will only drop price by 0.75 and will save operational costs
- **Scenario 2)** Results in a ticket price increase of \$1.99 (\$3474638 annually)
- **Scenario 3)** Results in a ticket price increase of \$1.99 (\$3474638 annually)
- **Scenario 4)** No price change



# Summary & Conclusion

- Current price point is an under-evaluation of what Big Mountain Resort has to offer
  - \$94.22 is the recommended price, could charge up to \$105 and still be considered reasonable
- For additional revenue, BMR could deploy suggested scenarios 1-3
  - Closing down runs can be ambiguous; price affected by at most \$1.75
- Random Forest model can be used again in the future and will perform better with additional data acquired
  - Points worth investigating
    - Covid-19 Protocols and how its affected business
    - Resorts proximity to society and restaurants, businesses, hotels, etc
    - Night skiing