BIG MOUNTAIN RESORT: MAXIMIZING REVENUE

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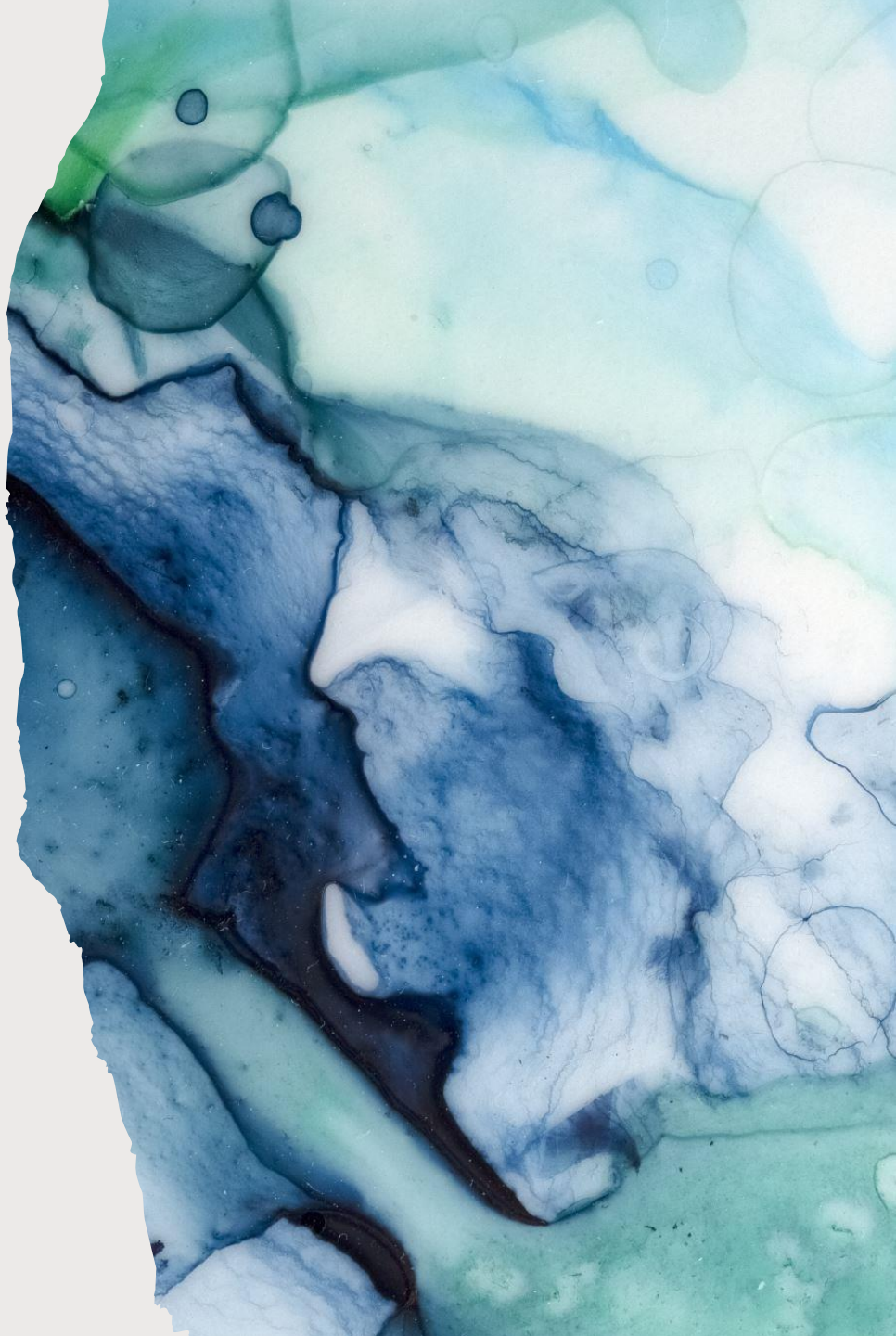


OBJECTIVE

- What possibilities are available for Big Mountain Resort to boost profitability?

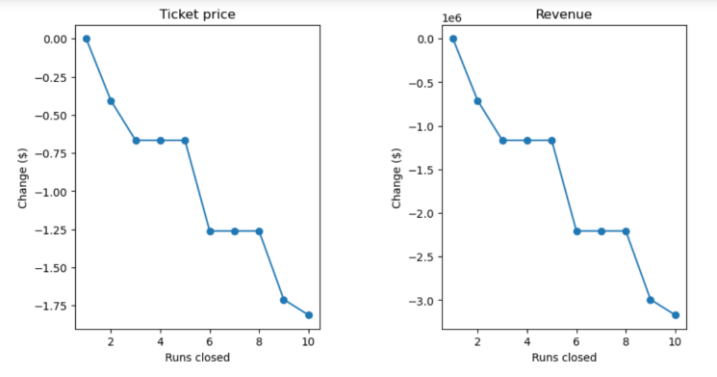
  - ❖ Minimizing operational costs without compromising ticket prices
  - ❖ Setting a strategically optimized ticket price, considering the facilities in comparison to other resorts in the market share.

RECOMMENDATION & KEY FINDINGS

- Scenario 1 – Closing Runs

  Permanently close upto 10 of the least used runs

  - ❖ Closing upto 5 runs decreases the revenue by $1.2 mil
  - ❖ Expanding the closures to six or more results in a substantial decline.
    - ❖ Closing 10 runs will lead to revenue loss of about $3.5 million.



- Scenario 2 – Vertical Drop Expansion

  Increase the vertical drop by adding a run to a point 150 feet lower down with installation of an additional chair lift

  - ❖ Based on the model, Big Mountain can increase the ticket prices by $1.99. Over the season, this could be expected to increase the revenue by $3,474,638.

RECOMMENDATION & KEY FINDINGS

- Scenario 3 – Adding Snow Making Coverage

  On top of Scenario 2, add snow making coverage of 2 acres.

  ❖ The result doesn't differ from Scenario 2. A marginal expansion in the snow-making area has negligible impact

- Scenario 4 - Longest Run Extension

  Increase the longest run by 0.2 miles and guaranteeing its snow coverage by adding 4 acres of snow making capability

  ❖ No observed benefit. However, both the capital and operating costs will increase due to the additional snow coverage.

MODEL DEVELOPMENT

- The following Data Science Method (DSM) steps were adopted to develop and analyze the ticket pricing model:
    1. Problem identification
    2. Data wrangling
    3. Exploratory data analysis
    4. Pre-processing and training data
    5. Modelling

ANALYSIS

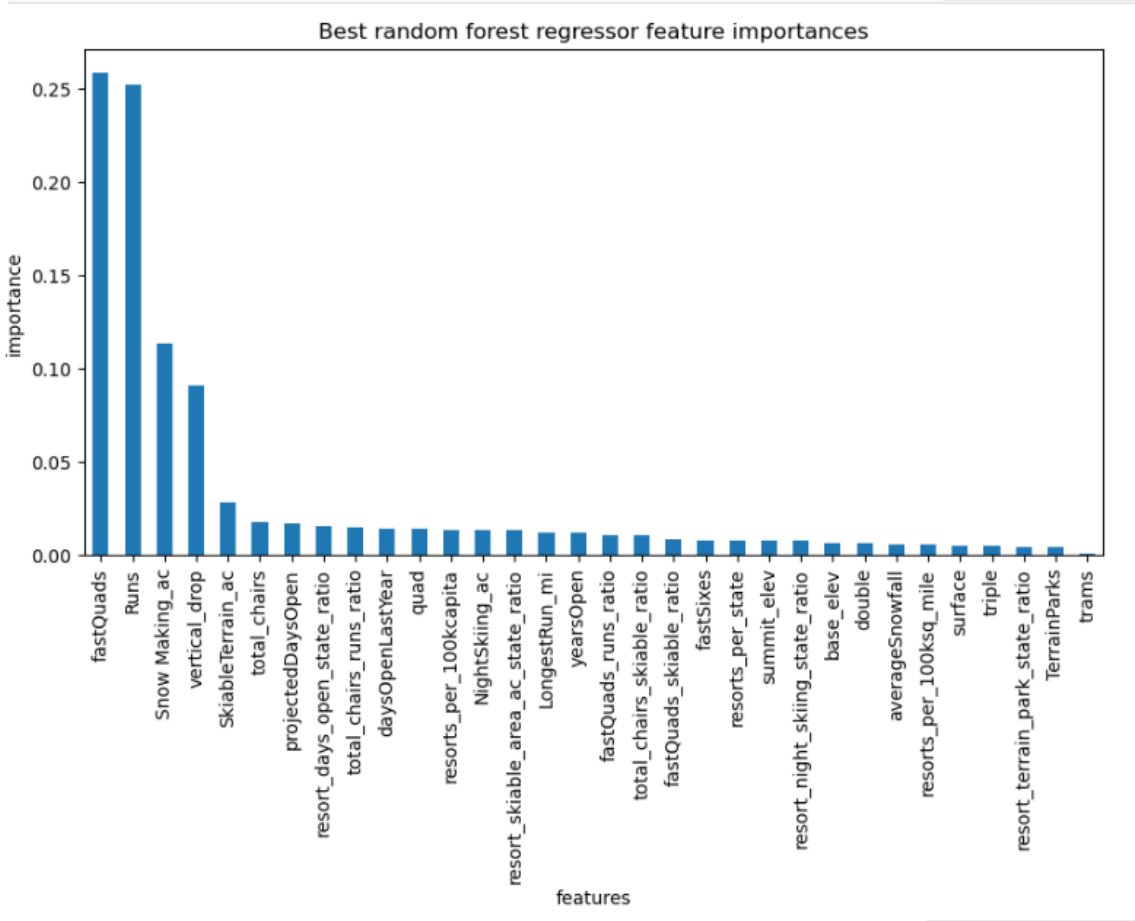
- Based on the Random Forest and Linear Regression models, four dominant features are identified to optimize the ticket pricing.

  Fast Quads

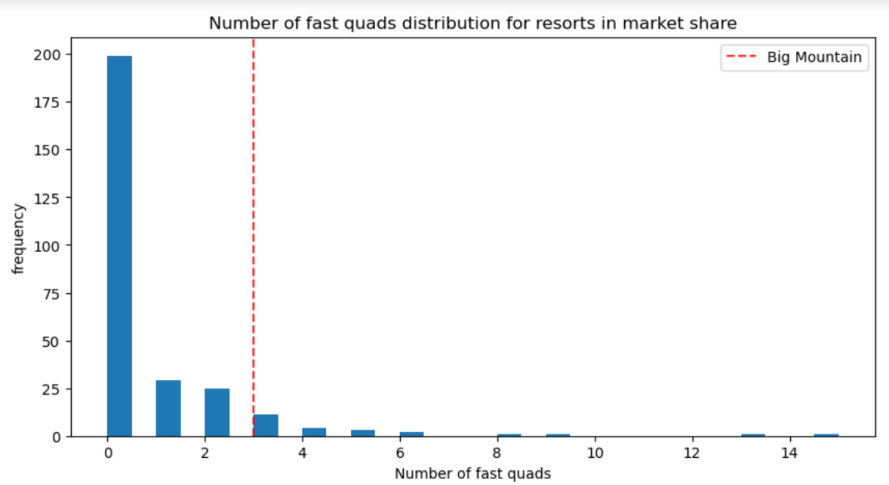
  Runs

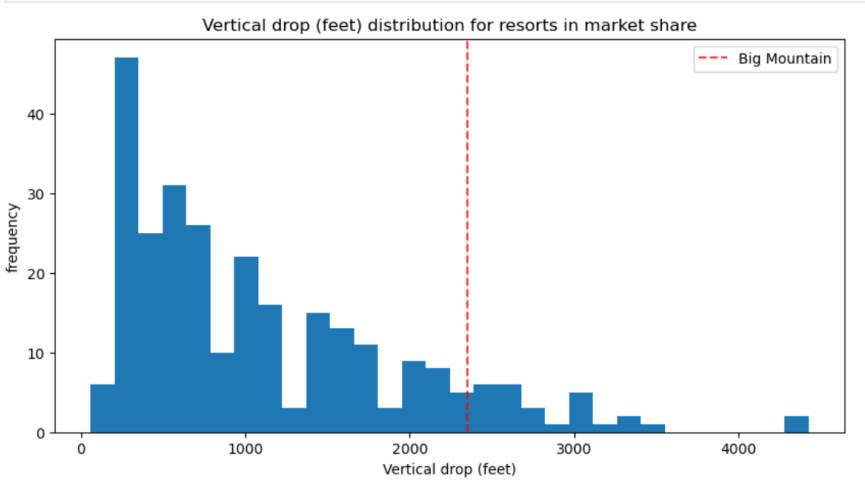
  Vertical Drops

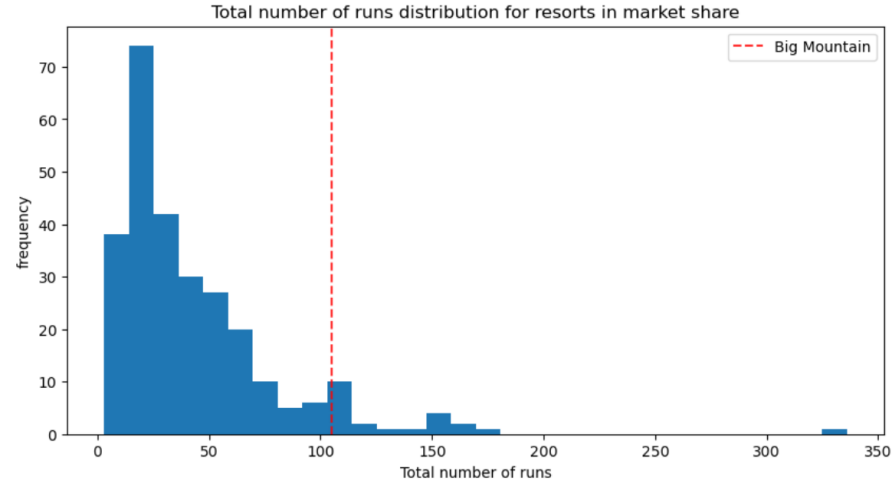
  Snow Making area

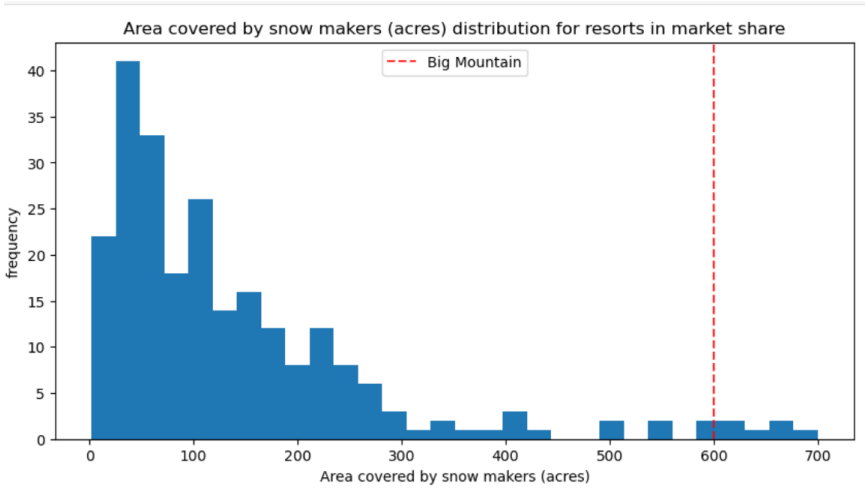


ANALYSIS: BIG MOUNTAIN'S POSITION









SUMMARY & CONCLUSION

- Based on the scenarios tested on current model, expanding the vertical drop by adding a run 150 feet lower and installing an additional chairlift without introducing extra snow-making coverage, it is evident that such a strategy is poised to generate a significant increase in revenue for the resort.