Big Mountain resort modeling

Guided Capstone Project

Yuri Londer

Problem: How can Big Mountain resort increase the revenue in next skiing season?

Options:

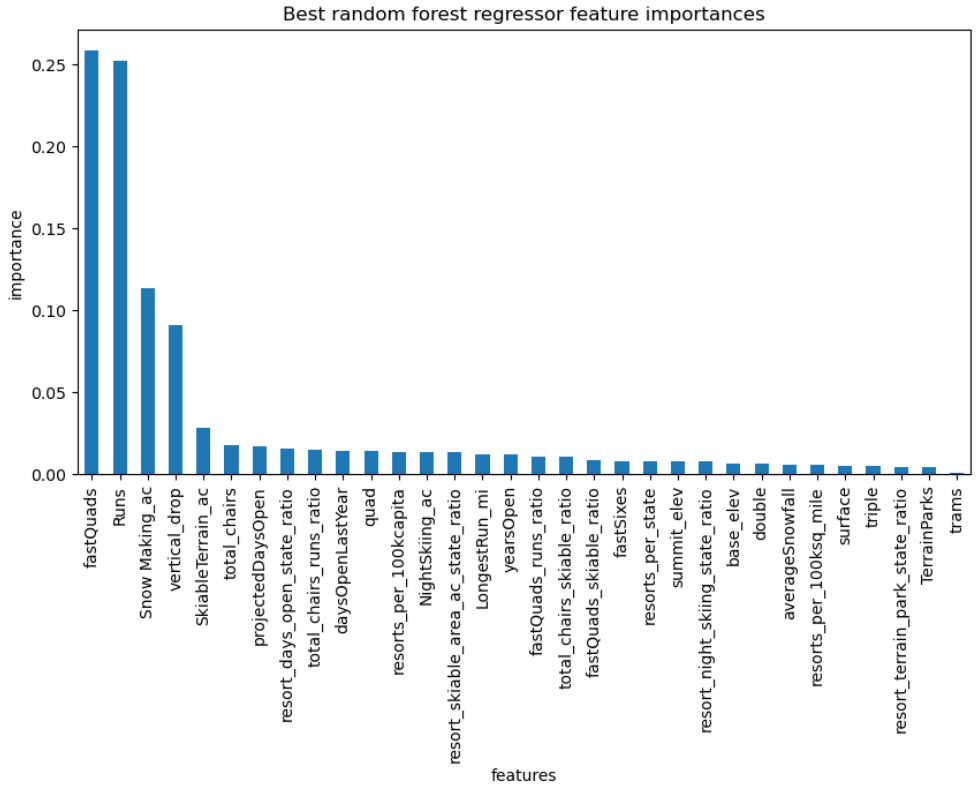
- Cutting down on infrastructure (to reduce operating costs)
- Increasing ticket prices

Approach: Modeling the ticket price

Available data: Dataset containing info about facilities and natural features at 330 ski resorts in the same market share

Results

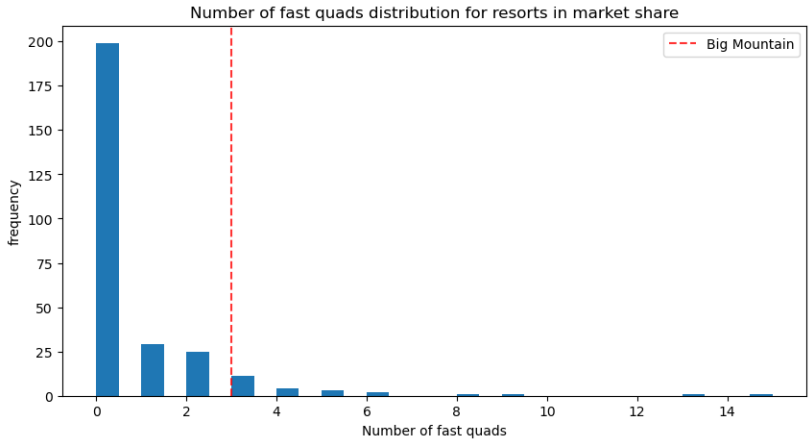
Our model identified four main features:
- Number of fast quads
- Total numbers of runs
- Snow making area
- Vertical drop

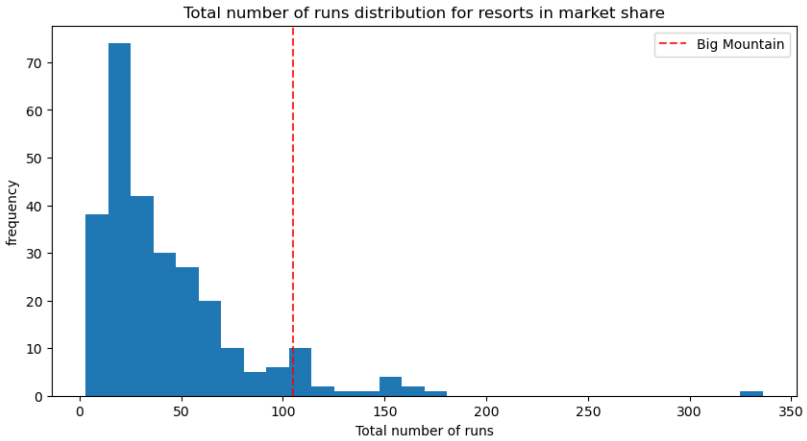


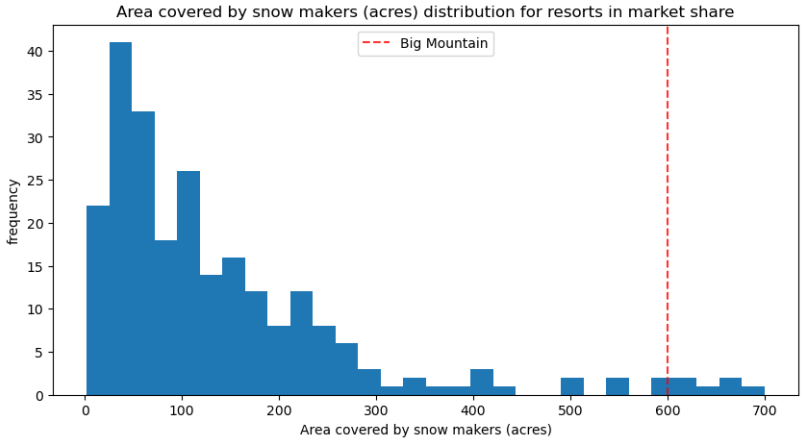
Current price: $81

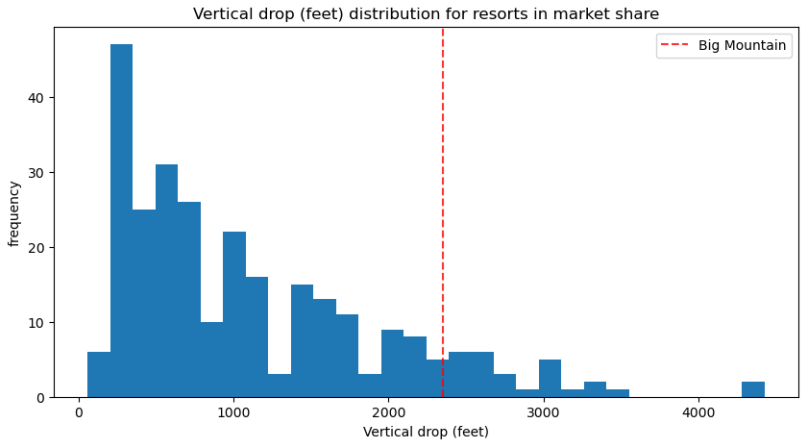
Suggested new price: $96

As far as the most important features are concerned, Big Mountain resort is in top 10-20% of all resorts in its market share









Therefore, nearly 20% increase in price is justified

Modeling additional scenarios
(cutting costs or increasing revenue)

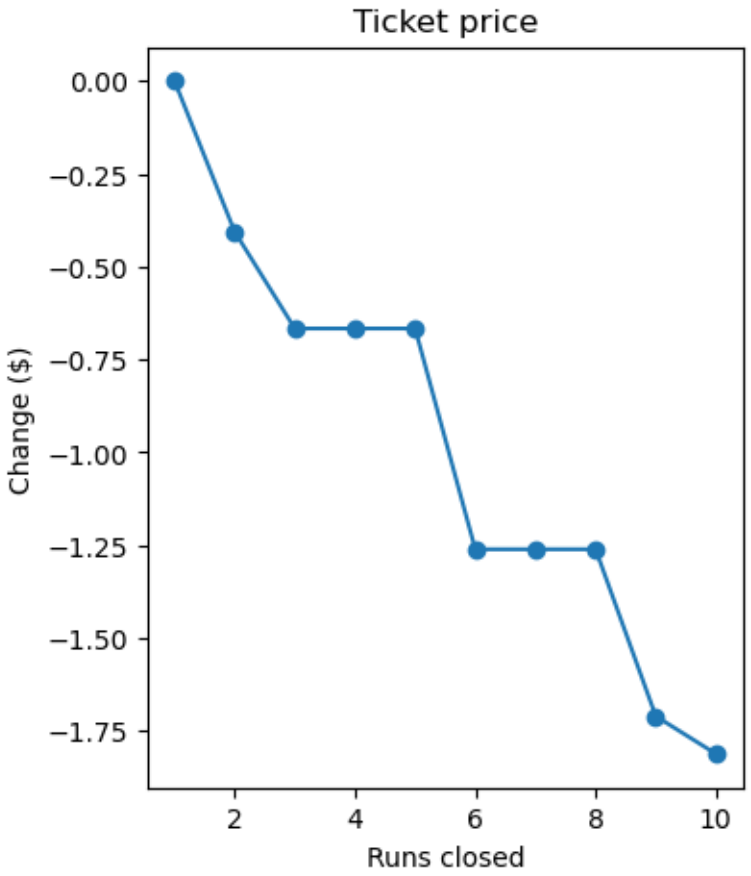
1. Permanently closing down up to 10 of the least used runs.
2. Increasing the vertical drop by adding a run to a point 150 feet lower down (would require the installation of an additional chair lift)
3. Same as number 2, but adding 2 acres of snow making coverage
4. Increasing the longest run by 0.2 mile (would require 4 acres of an additional snow making coverage)

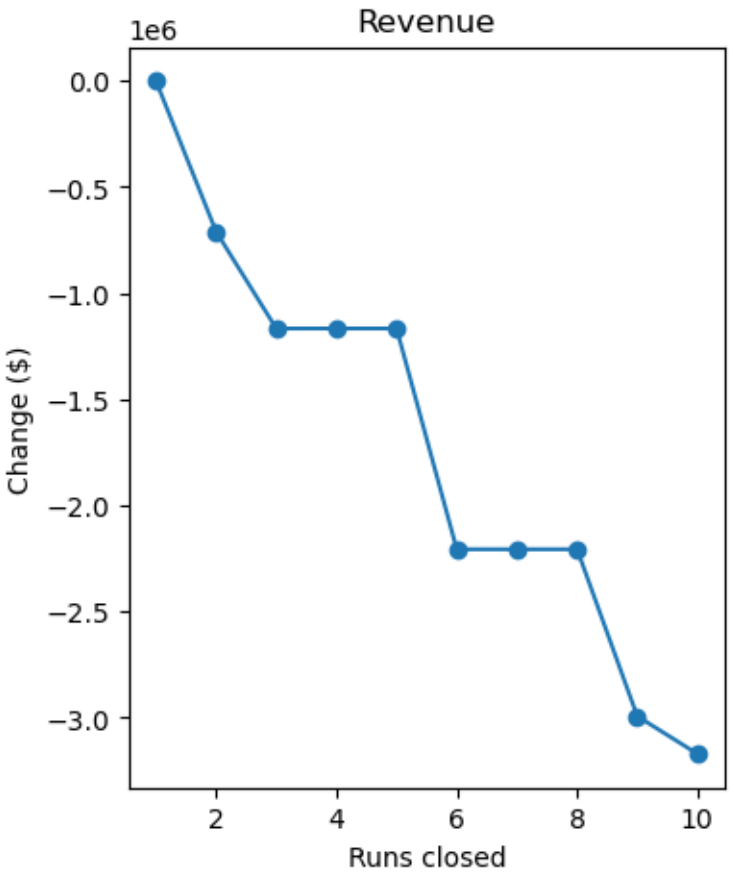
Assumptions:

- Expected number of visitors per season is 350,000
- Average visitor skies for 5 days

Scenario 1: Close down up to 10 of the least used runs

Predicted drop in ticket price and revenue calculated in terms of our model





Recommendation: Depends on how much can be saved by closing runs

Scenario 2: Increase the vertical drop by adding a run to a point 150 feet lower down (extra chairlift required)

- Justifies increasing the price by $2
- Would generate $3.5M in extra revenue
- More than enough to cover additional operating costs ($1.5M)

Recommendation: Do it!

Scenario 3: Same as Scenario 2 but with 2 more acres of snow making coverage

Makes no difference compared to Scenario 2

Recommendation: Stick to Scenario 2

Scenario 4: Increase the longest run by 0.2 miles
(4 more acres of snow making coverage required)

Makes no difference

Recommendation: Don't bother