Big Mountain Ski Resort

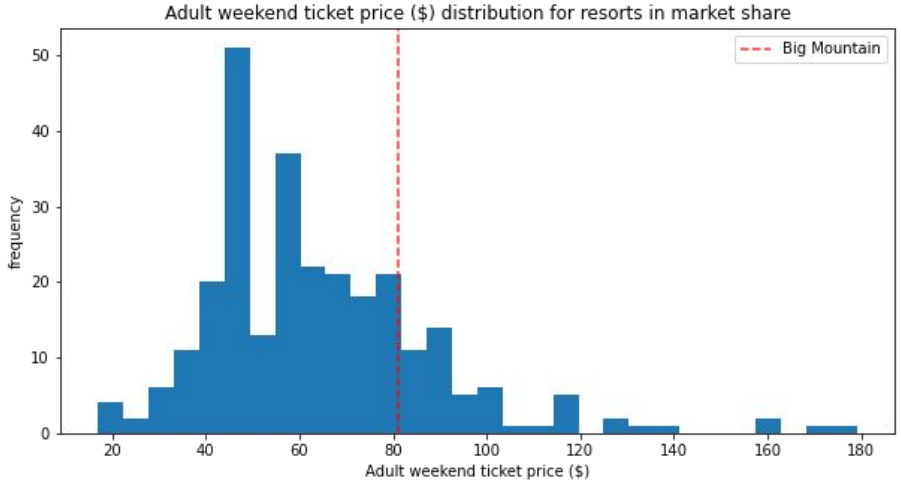
Price modeling summary

Goal of study

- **Determine Big Mountains ticket price based off of market prices**
- **Identify important features contributing to ticket price**
- **Test various scenarios for changes in features and how that would affect ticket price and revenue.**

Modeled adult weekend ticket prices

- **Big Mountain current price** $81
- **National average** $63
- **Modeled Big Mountain value** $95.87
- Adult weekend ticket prices used due to least number of missing values when compared with weekday ticket prices.



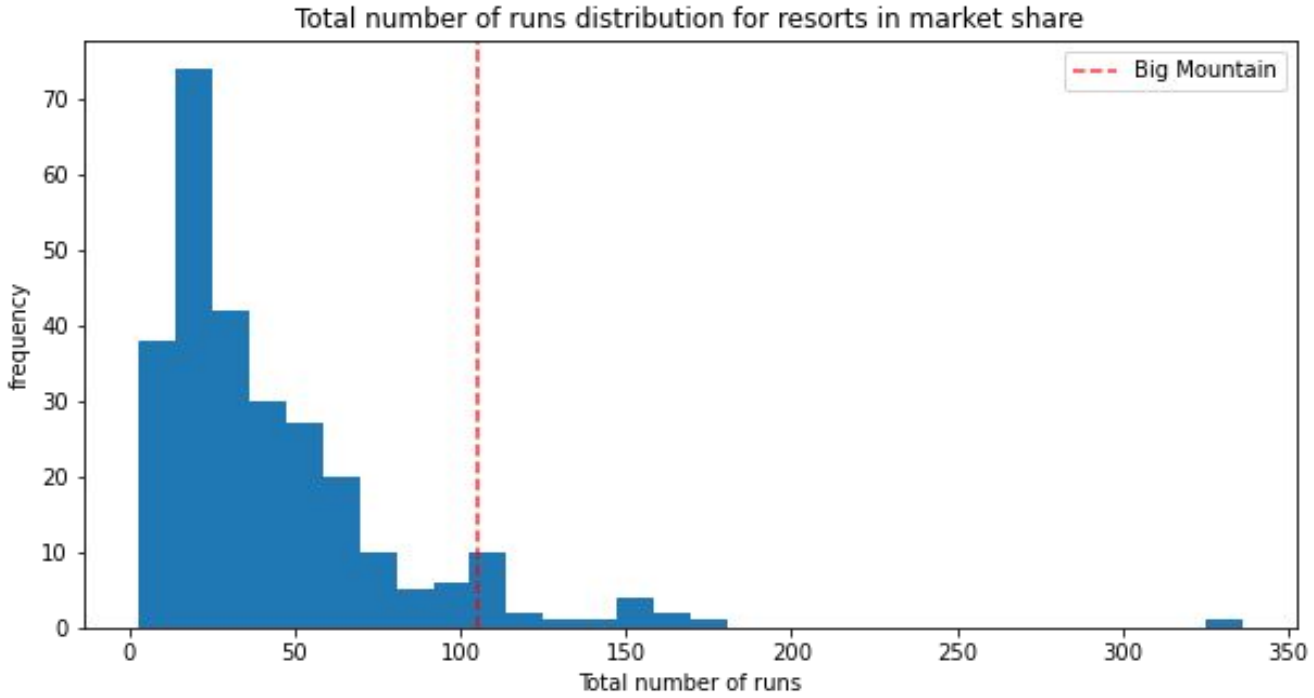
Ranked importance between features in contributing to adult weekend ticket prices

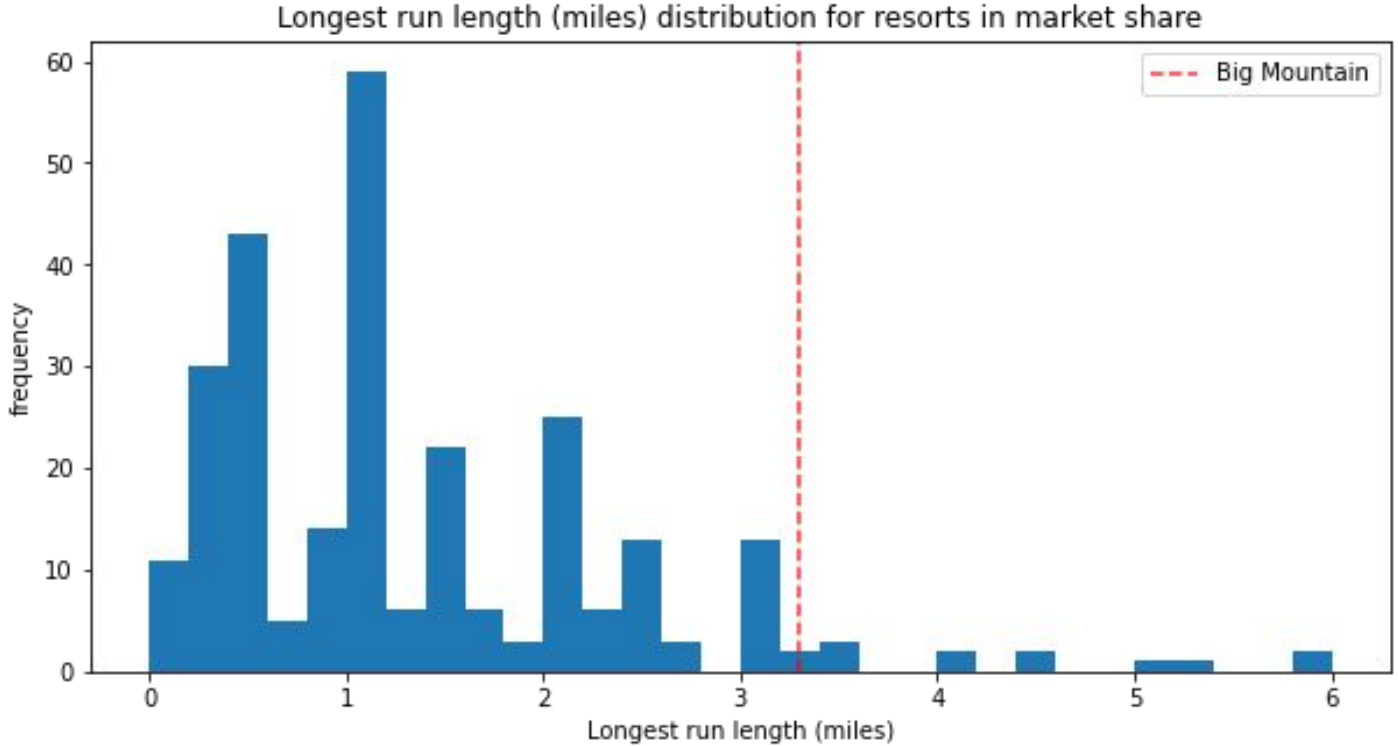
Feature	LM importance	RF importance
Vertical drop	1	4
Snow making acres	2	3
Total chairs	3	6
Fastquads	4	1
Runs	5	2
Longest run	6	15

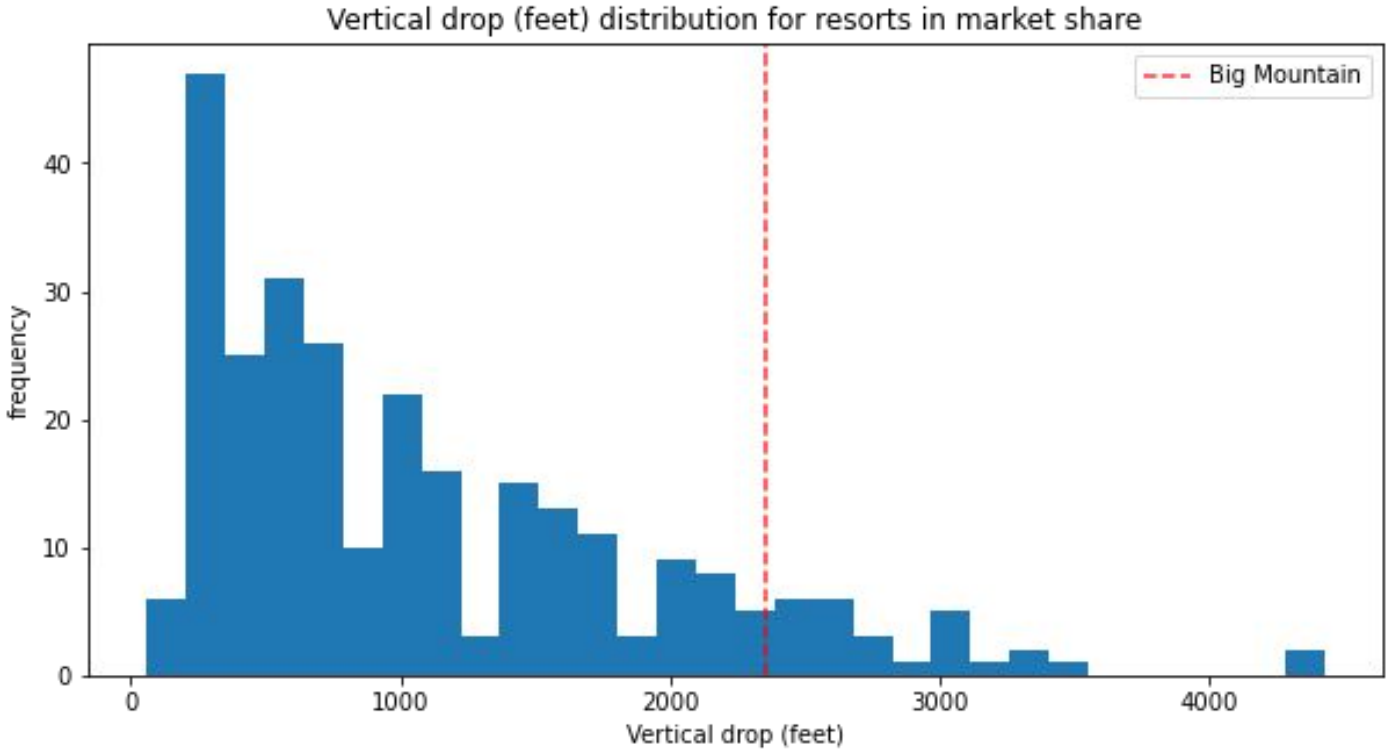
Importance of features to adult weekend ticket prices

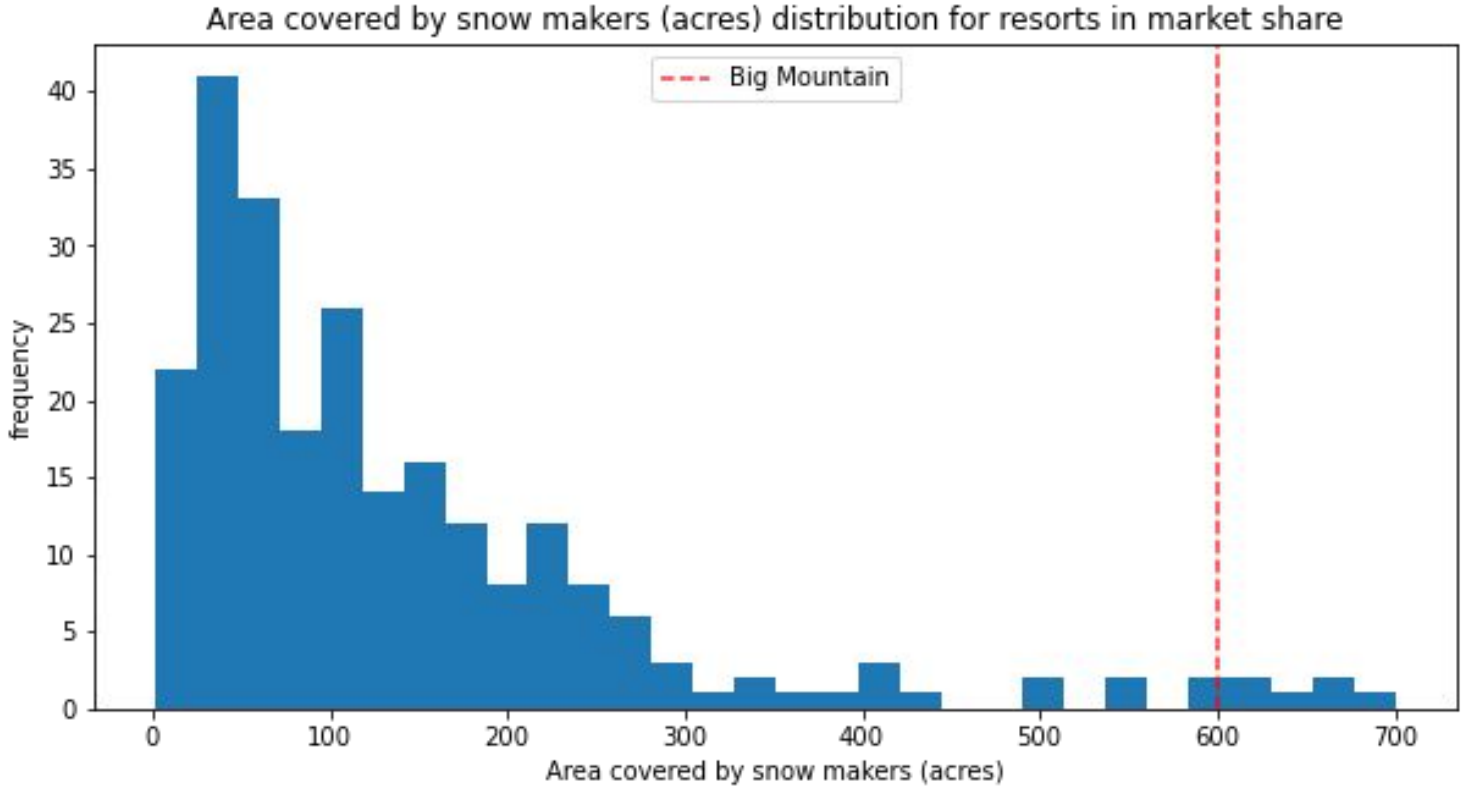
- Vertical drop, snow making acres, total chairs, fastquads, and runs were found to have the strongest influence on adult weekend ticket prices according to the two models prices for weekend
- Longest run is shown here simply to demonstrate major drop in importance on ticket prices relative to higher ranking features as demonstrated for RF model. LM also numerically demonstrated a major drop in importance.
- Longest run, trams, and skiable terrain also influence price but are of lesser importance than those mentioned in the first bullet point above.
- Big Mountain places within the upper tier for features with strongest influence on ticket price.

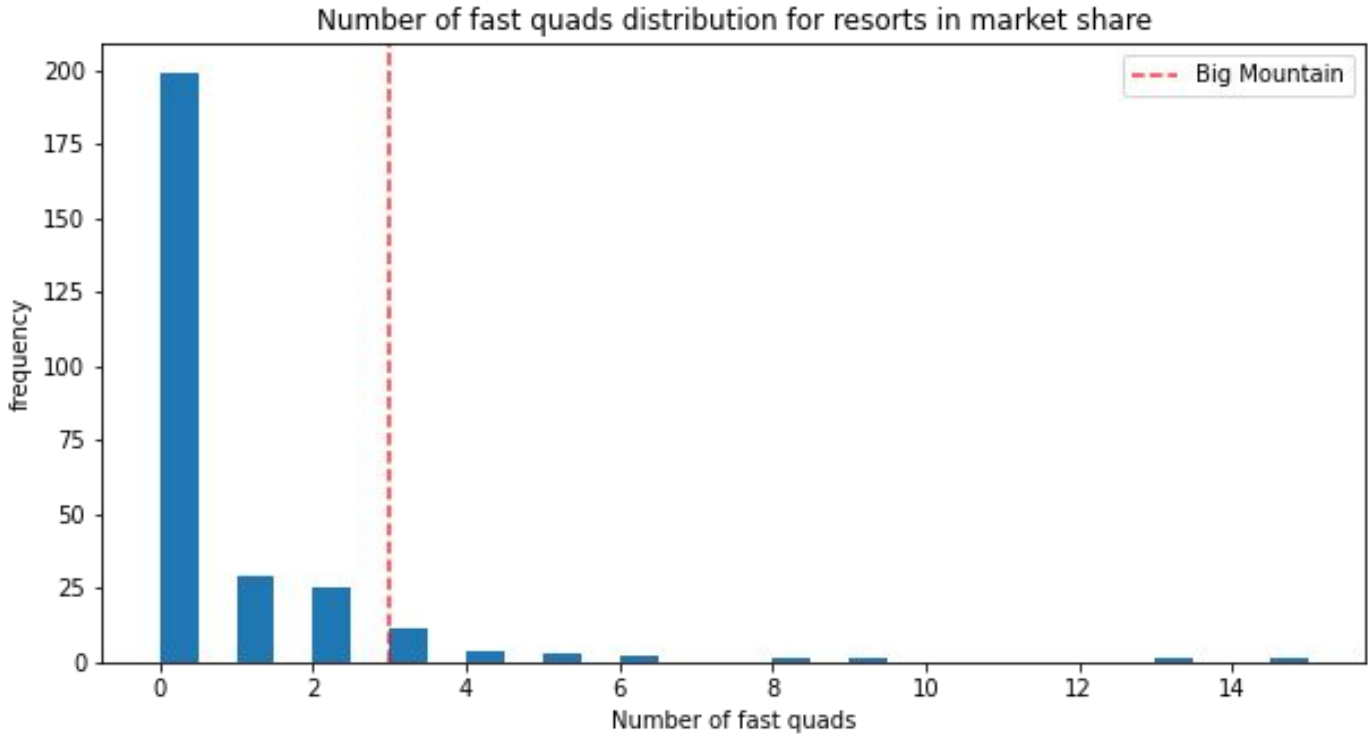
Big Mountains market position for important features

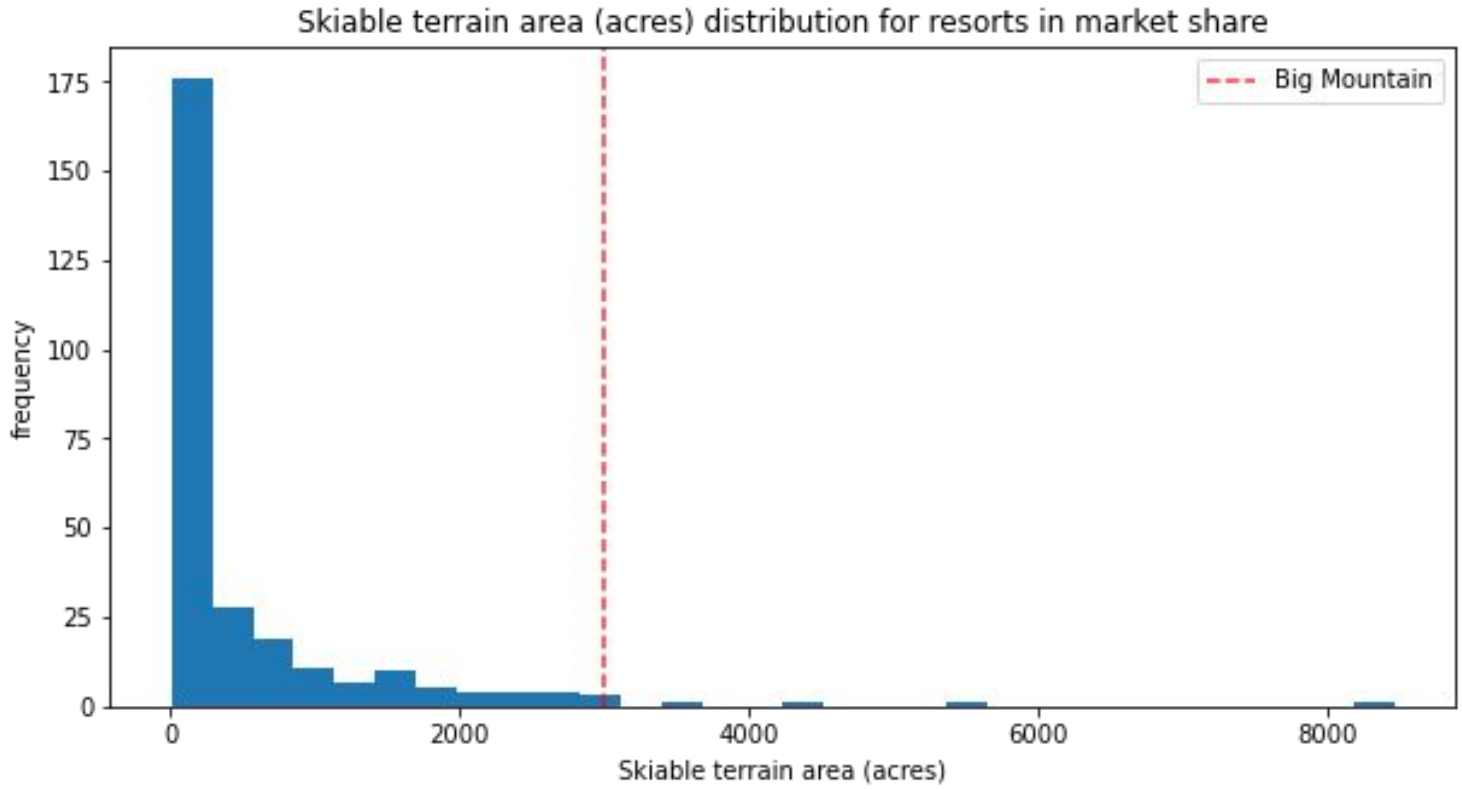


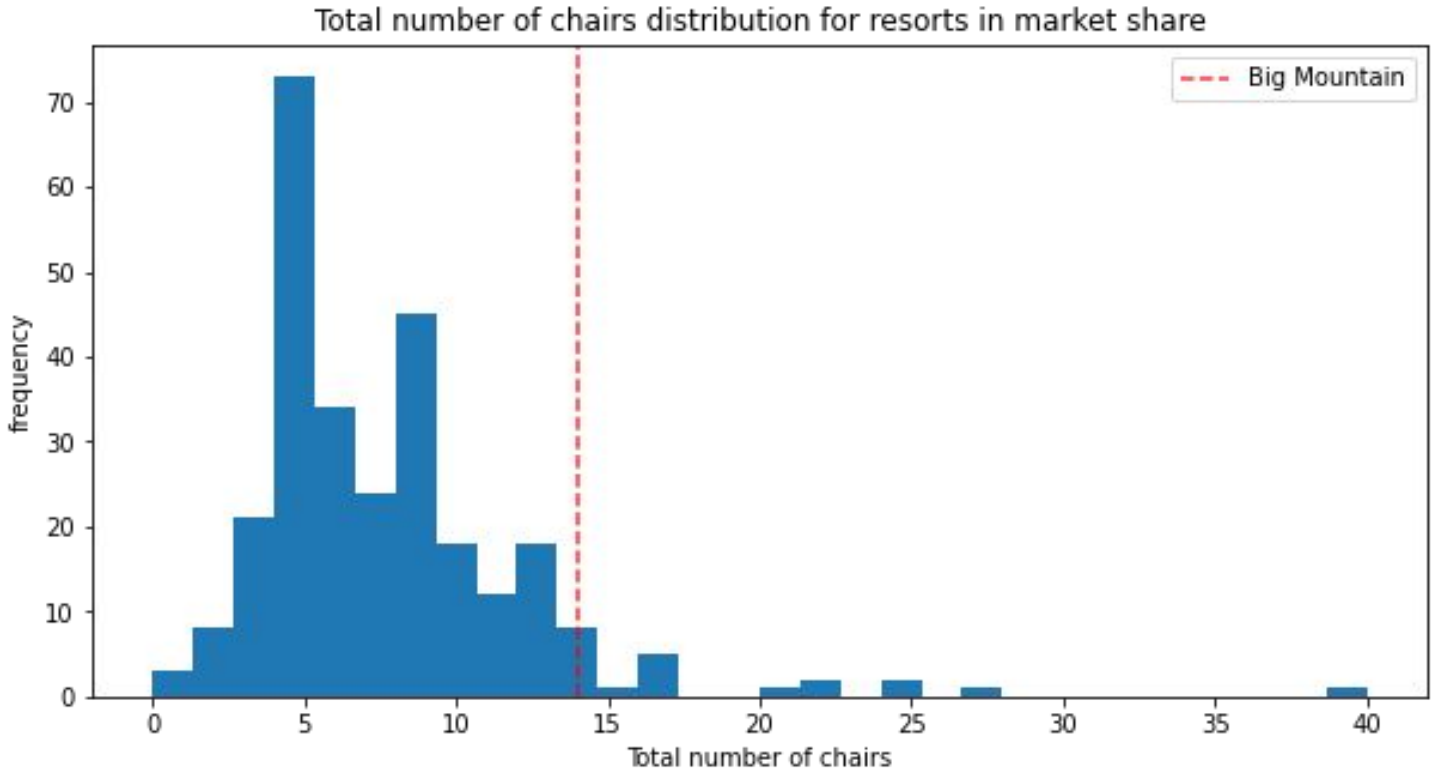

Longest run length (miles) distribution for resorts in market share
Big Mountain
frequency
Longest run length (miles)
0
10
20
30
40
50
60
0
1
2
3
4
5
6


Vertical drop (feet) distribution for resorts in market share
Big Mountain
frequency
0
10
20
30
40
0
1000
2000
3000
4000
Vertical drop (feet)


Area covered by snow makers (acres) distribution for resorts in market share
Big Mountain
frequency
0
5
10
15
20
25
30
35
40
0
100
200
300
400
500
600
700
Area covered by snow makers (acres)

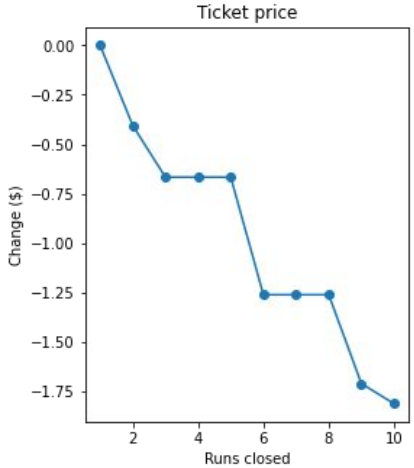

Number of fast quads distribution for resorts in market share
Big Mountain
frequency
200
175
150
125
100
75
50
25
0
0
2
4
6
8
10
12
14
Number of fast quads

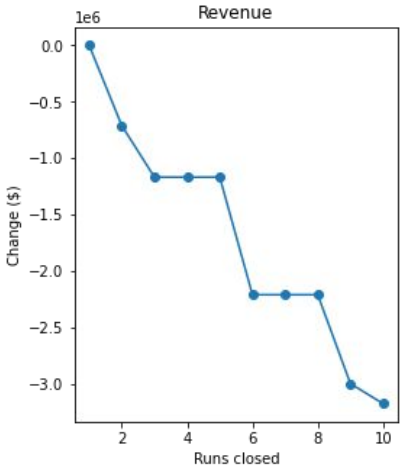

Skiable terrain area (acres) distribution for resorts in market share
Big Mountain
frequency
175
150
125
100
75
50
25
0
0
2000
4000
6000
8000
Skiable terrain area (acres)


Total number of chairs distribution for resorts in market share
Big Mountain
frequency
Total number of chairs
0
10
20
30
40
50
60
70
0
5
10
15
20
25
30
35
40

Influence of closing runs on ticket price

- Due to high number of runs at big mountain, closure of runs would result in a minimal drop in revenue and ticket prices.
- In order to minimize impact on revenue, closure of up to five runs should be carried out first. If this is successful, a closure of three more runs could be carried out.





Modeling feature scenarios

Vertical drop +150 feet, +1 run, +1 chair lift

- This scenario increases support for ticket price by $8.61
- Over the season, this could be expected to amount to $15065471

Vertical drop +150 feet, +1 run, +1 chair lift, +2 acres of snow

- This scenario increases support for ticket price by $9.90
- Over the season, this could be expected to amount to $17322717

Longest run +0.2 mile, +4 acres of snow

- This scenario leads to a $0 increase in revenue

Model for determining ticket price is available to test various feature scenarios