# BIG MOUNTAIN RESORT, MT

TICKET PRICE SELECTION ANALYSIS

DATA SCIENCE TEAM

**CREATED BY:**

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# Problem Statement

**What opportunities exist for Big Mountain Resort to increase their annual revenue by ~20% within the next financial year through selecting a better value for their ticket prices by comparing facilities from market comparable ski resorts?**

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## 1 Context

**Big Mountain Resort, a ski resort located in Montana that has access to 105 trails and an annual customer base of around 350,000 people, is serviced by 11 lifts, 2 T-bars, and 1 magic carpet, with the longest run being named Hellfire (3.3 miles). Recently, the resort has installed an additional lift which increases their operating costs by $1,540,000 this season. They suspect that they aren't capitalizing on their facilities as much as they could therefore a new data science team has been brought in for guidance on how to select a better value for their ticket price.**

## 2 Criteria for success

- **Success for this project = aligning on a detailed plan to increase annual revenue by around 20% by selecting a better value for the weekday and weekend ticket prices.**

## 3 Scope of solution space

- **The changes having to do with cost reduction or influential factors towards changes in ticket price will be held strictly relevant to operational activities due to the nature of the business and accessible stakeholders.**
- **This project is focusing mainly on the skiing arm of the business rather than any lodgings or other arm, for relevancy to the data source's information.**

## 4 Constraints within solution space

- **The solution is limited to the influence of the analysis of the 330 comparable ski resorts covered in the dataset.**
- **The value of the solution is implicitly constrained by the other statistics such as average income in the area (thought it was worth noting), and nearby substitutes.**

## 5 Stakeholders to provide key insight

- **Jimmy Blackburn (Director of Operations)**
- **Alesha Eisen (Database Manager)**

## 6 Key data sources

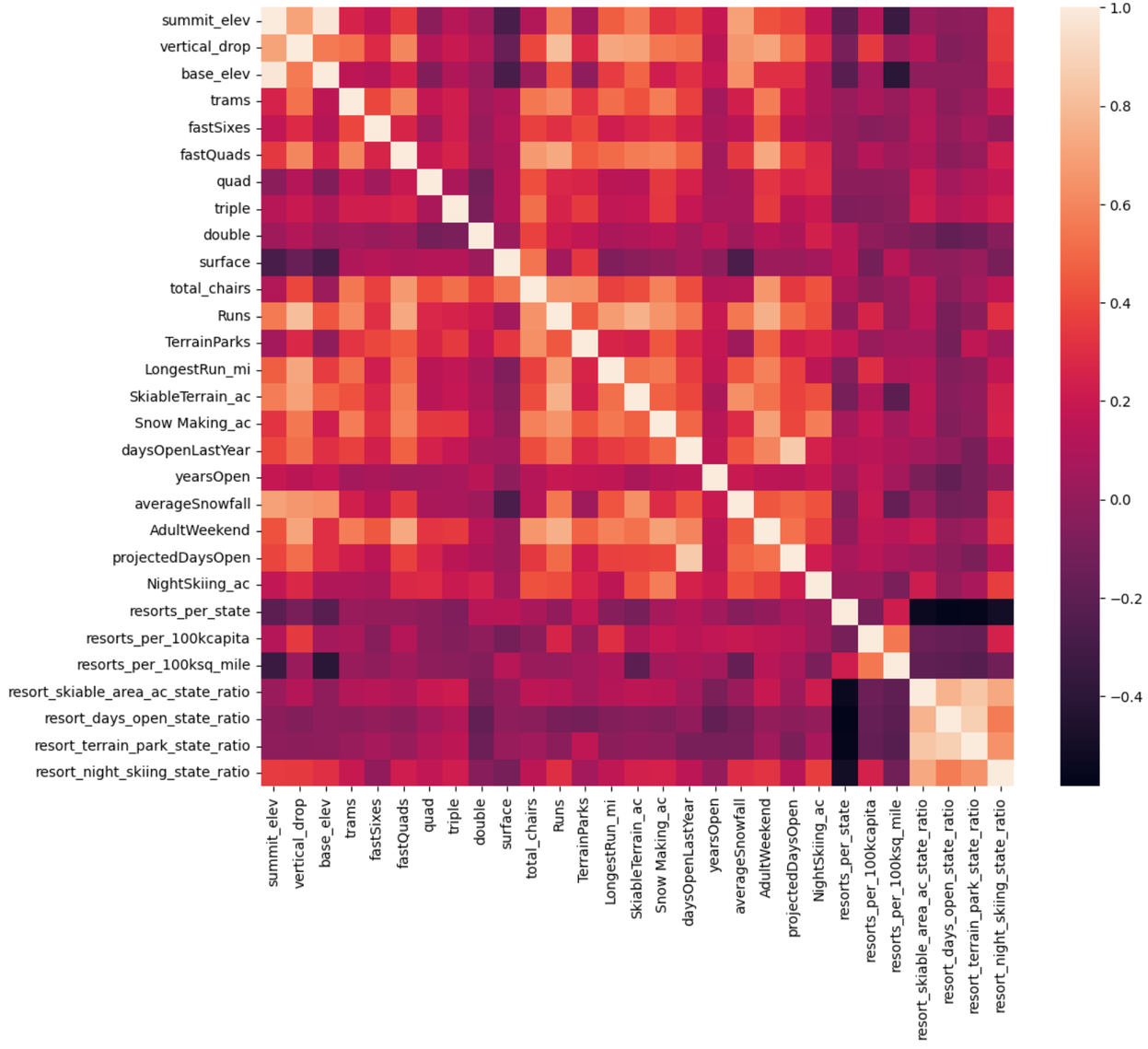
- **CSV file – received from the Database Manager, contains data regarding comparable ski resorts in Big Mountain's market segment with numbers covering weekday/weekend ticket prices, # of lifts and trams, elevation, etc.**

# RECOMMENDATIONS

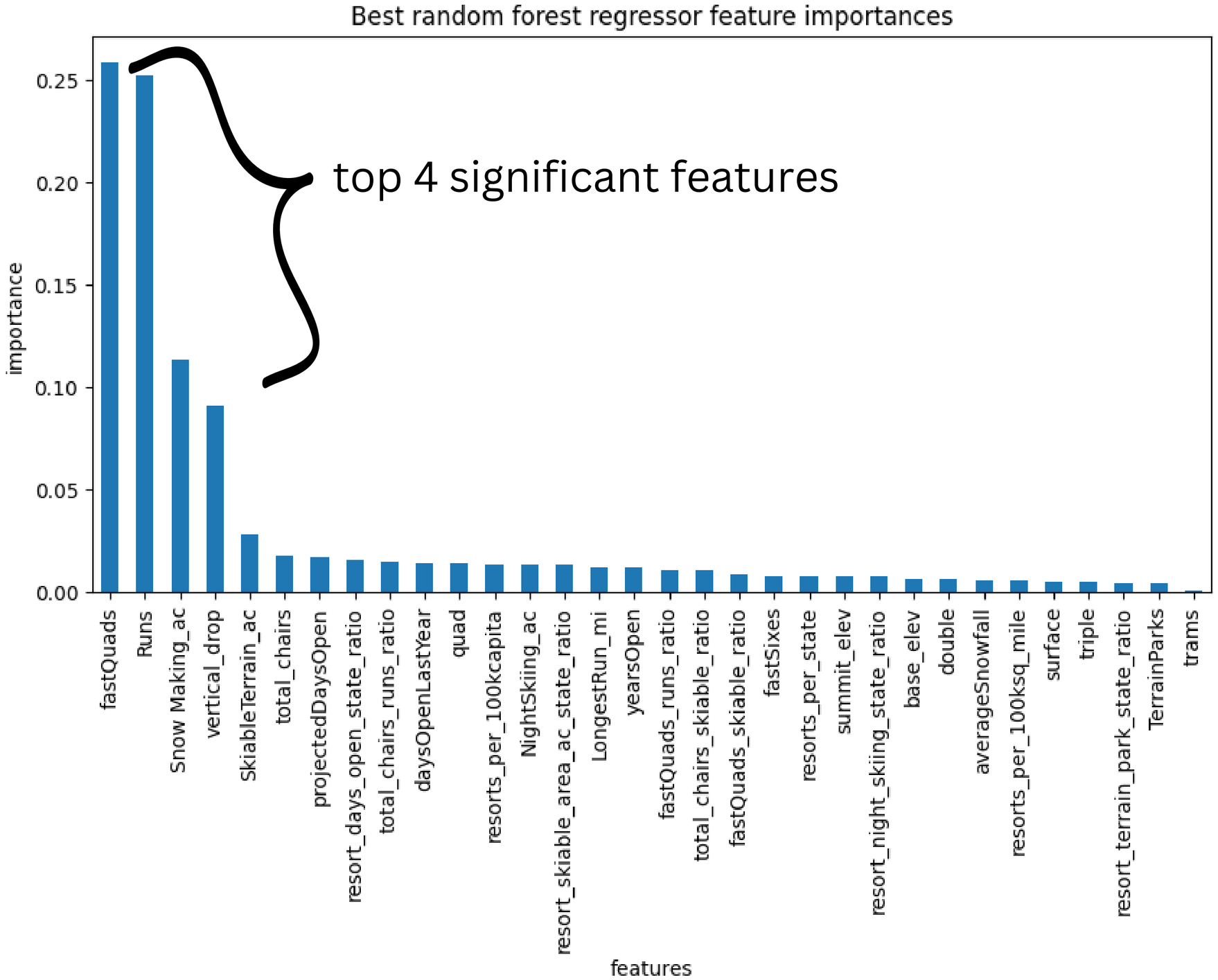
| | |
|---|---|
| Current Ticket Price: | $81 |
| Modeled Ticket Price: | $95.87 |
| Expected MAE: | $10.39 |
| Scenario 1: | close least used run |
| Scenario 2: | further analysis req. |
| Scenario 3: | NA |
| Scenario 4: | NA |

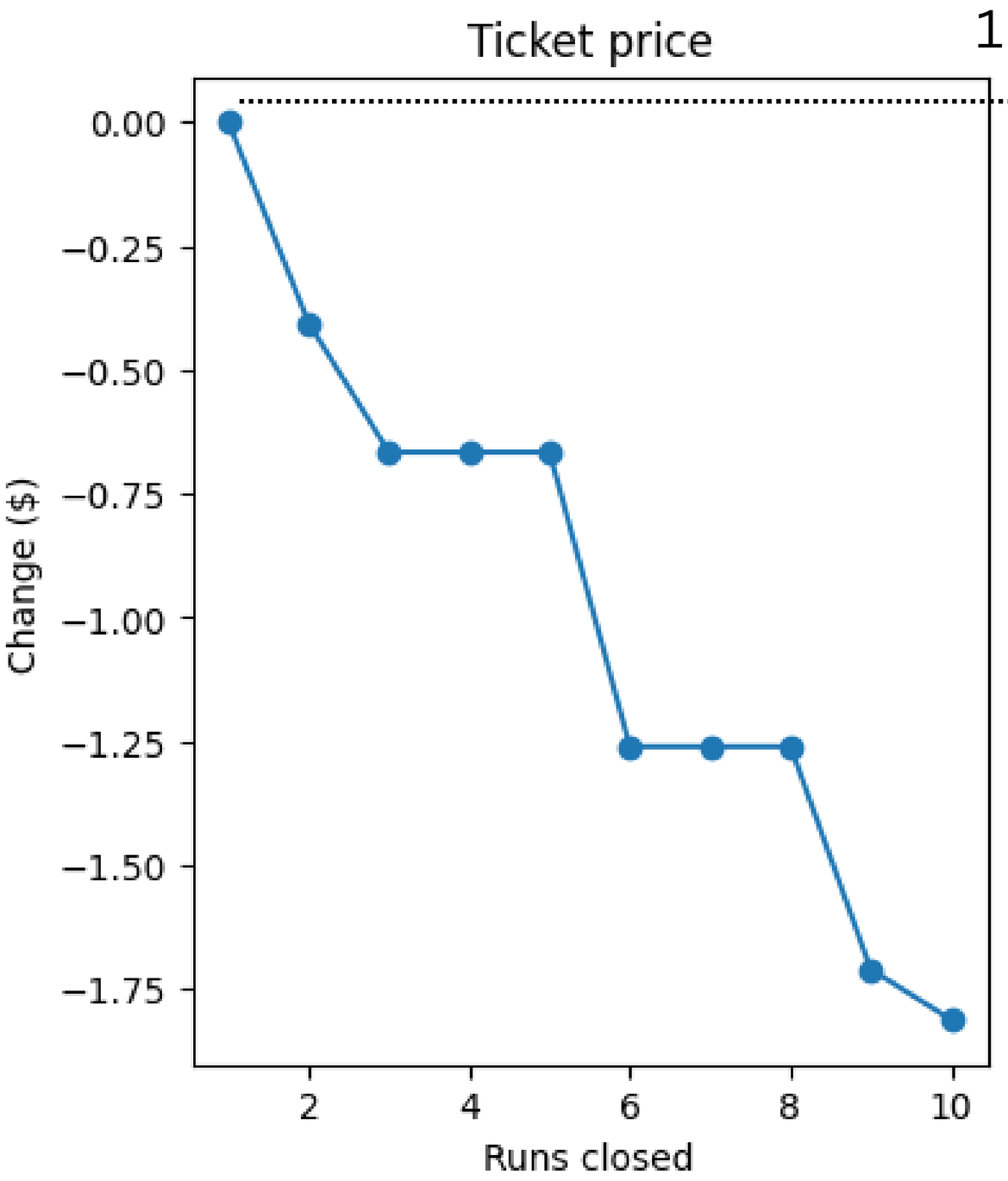
**SAMPLE SUGGESTED TICKET PRICE: $89.99**

# KEY FINDINGS

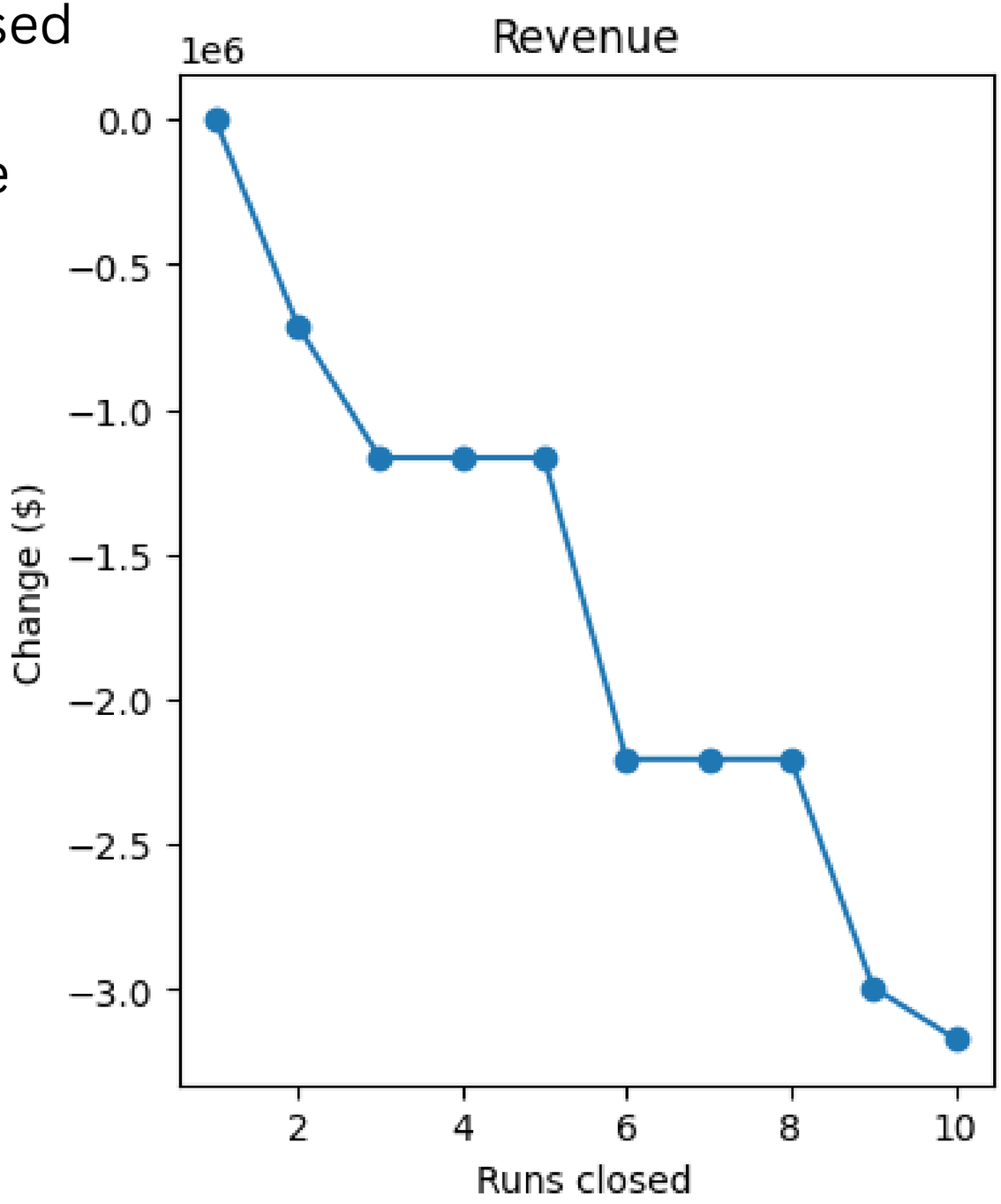


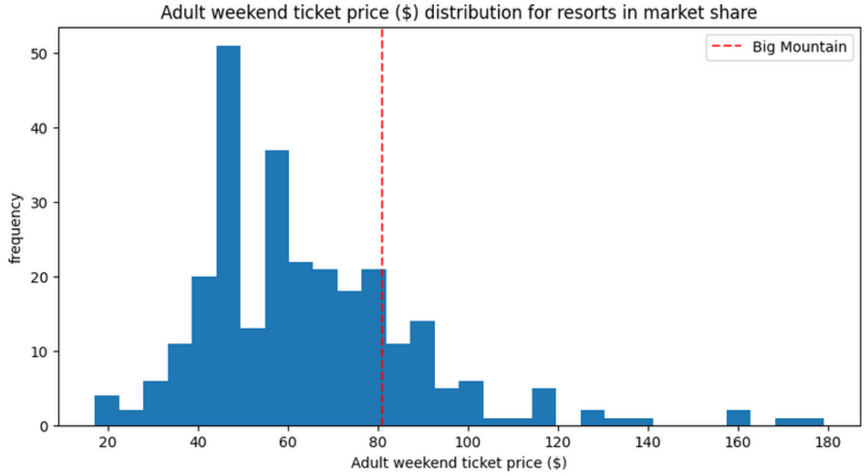
# MODEL RESULTS & ANALYSIS

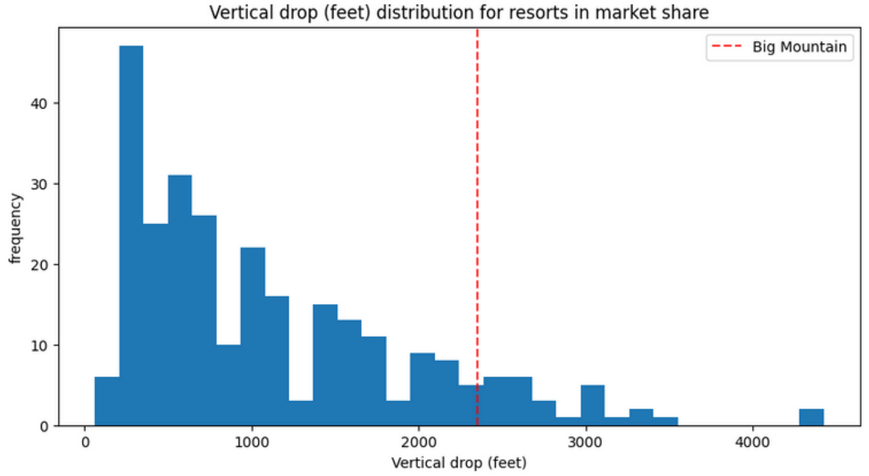


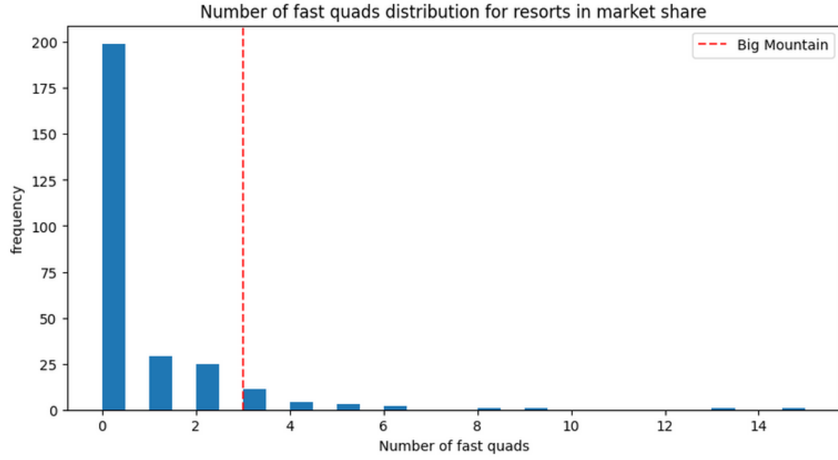


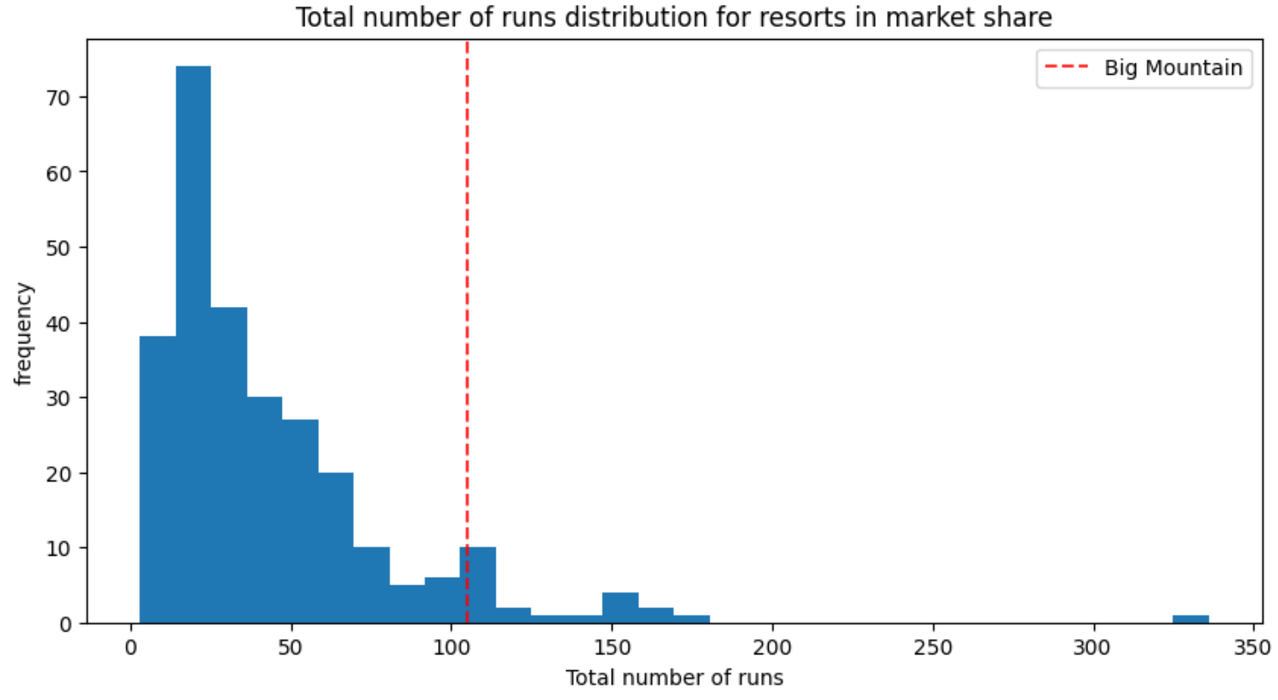

1 run closed --> no change

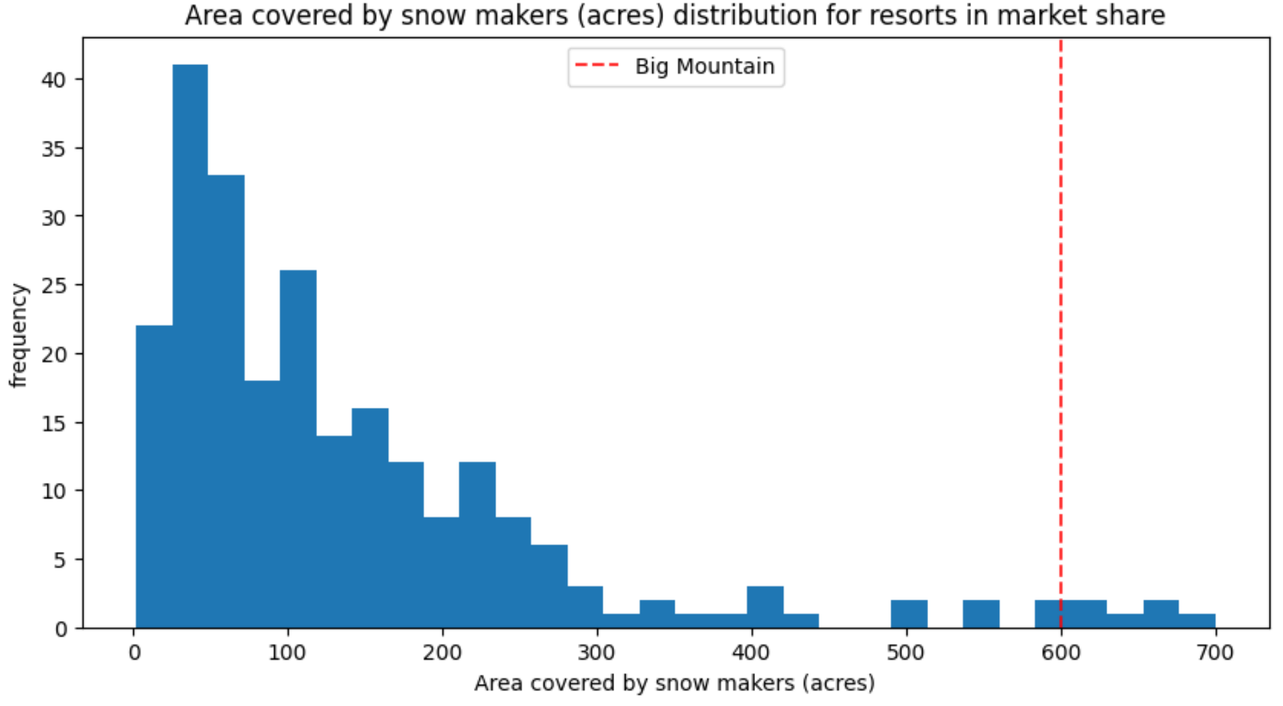



Adult weekend ticket price ($) distribution for resorts in market share
Big Mountain
frequency
Adult weekend ticket price ($)


Vertical drop (feet) distribution for resorts in market share
Big Mountain
frequency
Vertical drop (feet)


Number of fast quads distribution for resorts in market share
Big Mountain
frequency
Number of fast quads


Total number of runs distribution for resorts in market share
Big Mountain
frequency
Total number of runs


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

# SUMMARY & CONCLUSION

INCREASING THE CURRENT TICKET PRICE TO THE EXAMPLE TICKER PRICE OF $89.99 WHICH IS WELL WITHIN THE EXPECTED MAE WOULD INCREASE REVENUE BY ~11.1%

CLOSING THE LEAST USED RUN WOULD NOT DECREASE SUPPORT FOR TICKET PRICE. CLOSING MORE THAN ONE WILL DECREASE SUPPORT. IF CLOSING AT LEAST THREE, CLOSE FIVE, AND IF CLOSING AT LEAST SIX, CLOSE EIGHT.

FUIRTHER ANALYSIS IS NEEDED TO DETERMINE WHETHER GOING THROUGH WITH SCENARIO 2 TO INCERASE PRICE SUPPORT BY $1.99 IS WORTH WHATEVER ADDED EXPENSE IS INCURRED WITH THE CHANGE.