



# **Big Mountain Resort Pricing Investigation Report**

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February 5, 2023

## **Problem Identification**

- **Big Mountain Resort offers 105 trails that are serviced by 11 lifts, 2 T-bars, and one magic carpet. Recently, the resort installed an additional chair lift to increase the distribution of visitors across the mountain, which increased the operation cost of the lift by \$1,540,00 this season.**
- **Big Mountain Resort needs to find a way to increase profit margins by cutting costs, if possible, and making better use of its already facilities to justify higher ticket prices by the end of this ski season.**

# Problem Statement Worksheet (Hypothesis Formation)

How can Big Mountain Ski Resort make better use of its already existing facilities by utilizing more quad and triple chair lifts to reduce long lines by half in order to add more value to their ticket prices in order to justify higher ticket prices before the start of the next skiing season?

## 1 Context

Big Mountain Ski Resort is seeking to justify the premium added to their ticket prices, which is above the market average, in order to create more perceived value to the customer by making better use of its chair lift facilities in order to reduce wait times for its customers.

## 2 Criteria for success

Reducing chair lift lines by half with already existing facilities so that the resort is able to service more customers without long lines.

## 3 Scope of solution space

Increasing the number of larger quad and triple chairs to their already existing chair lifts in order to increase traffic flow and reduce chair lift lines by half so that the resort is able to service more customers without long lines.

## 4 Constraints within solution space

Not enough of readily available quad and triple chairs to add to already existing lifts to expand capacity of their chair lifts, which would require additional costs to implement.

## 5 Stakeholders to provide key insight

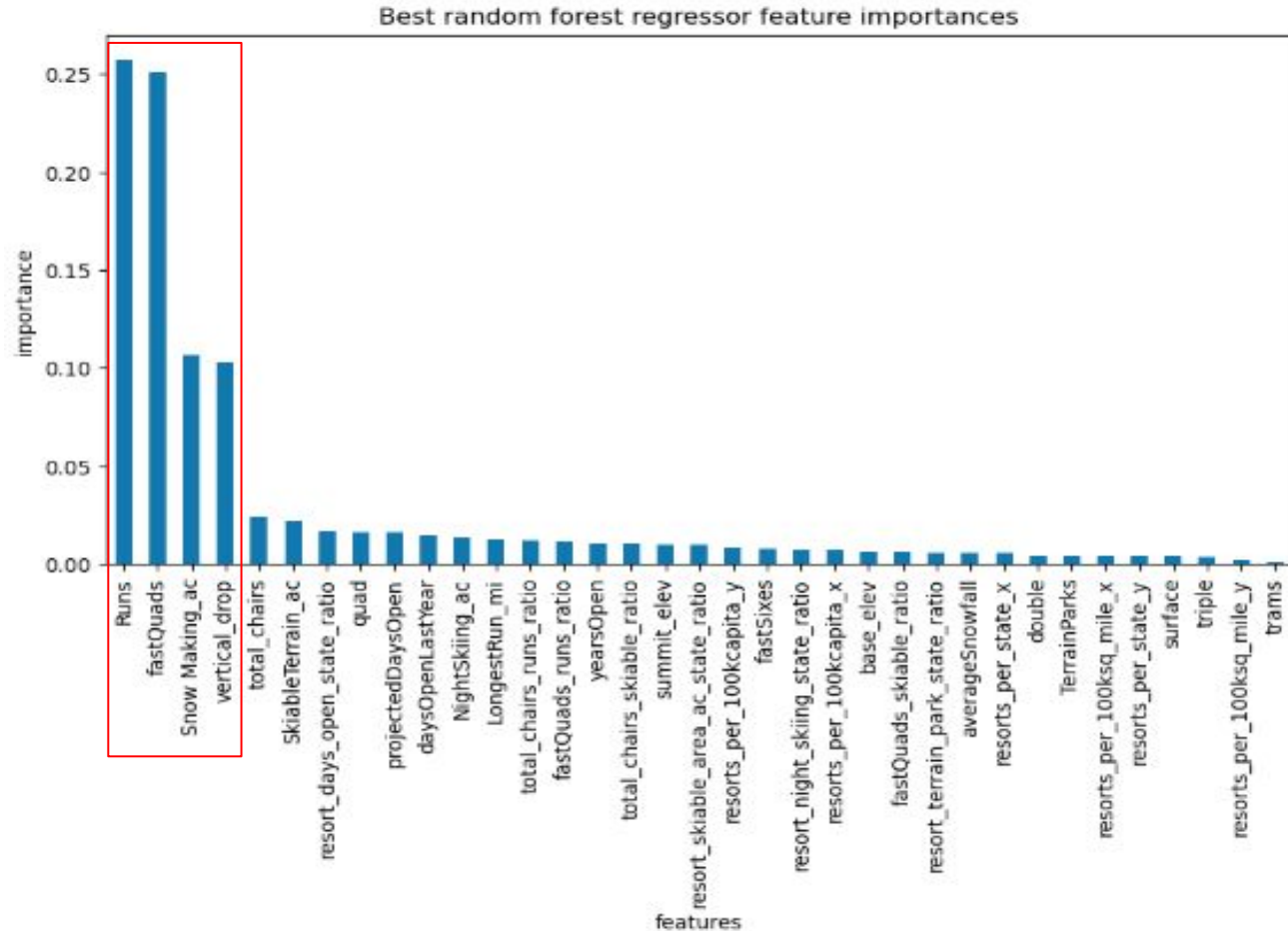
Jimmy Blackburn – Director of Operations  
Alesha Eisen – Database Manager – Source of Data  
Justin Henson – Data Scientist – Presenter of Recommendations

## 6 Key data sources

SQL database / S3 Bucket with relevant data

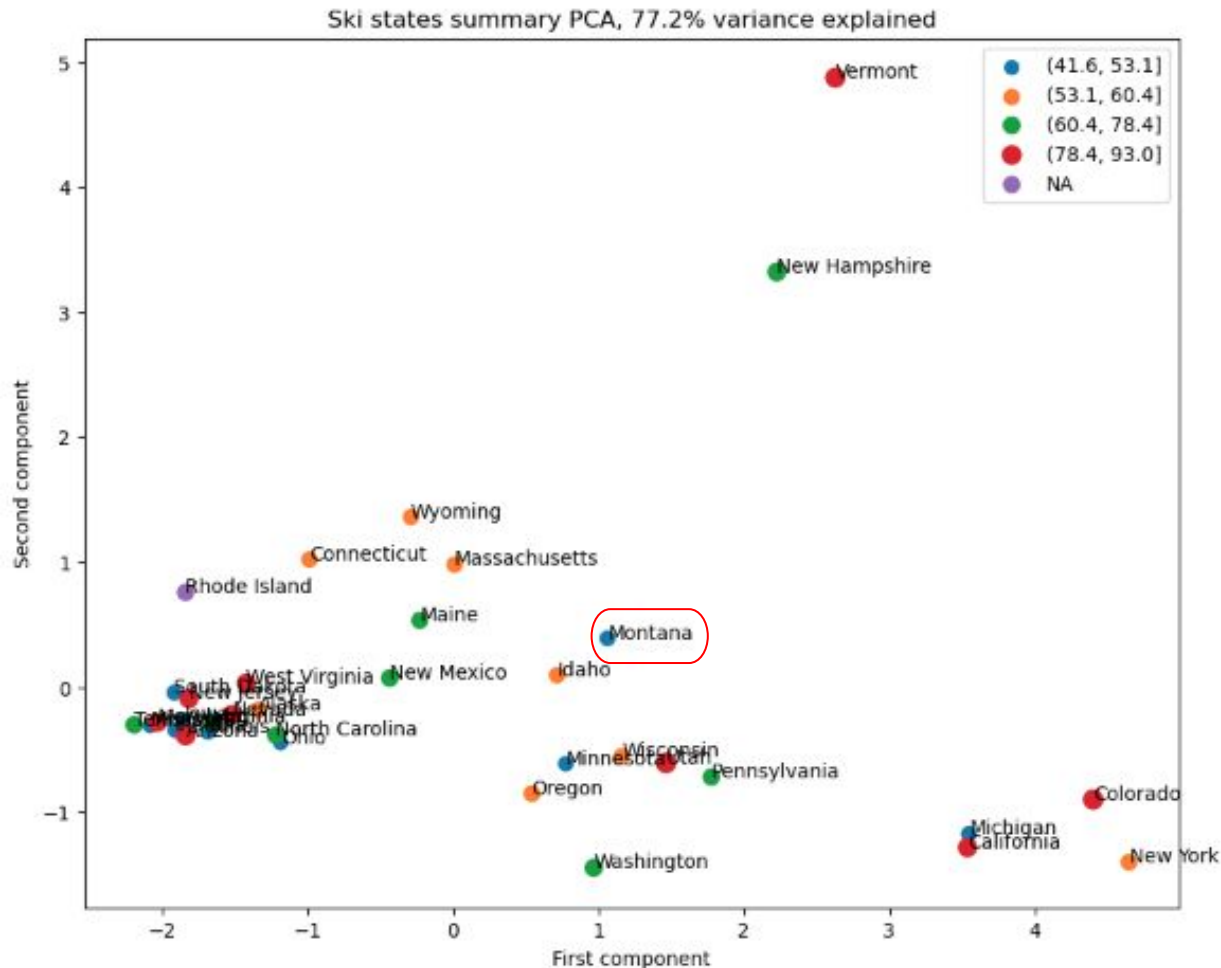
# Recommendation and Key Findings

- Big Mountain Resort **currently charges \$81USD** for their Adult Weekend ticket. **Our modelling suggests a ticket price of \$97.96USD.**
- **Scenario 2** proposes that we add one additional run, which would **increase the vertical drop by 150 feet**, and install an additional **chair lift**, which would be a one-time cost, of which **\$3,888,889USD** could be expected in revenue.



# Modeling Results and Analysis - Part 1

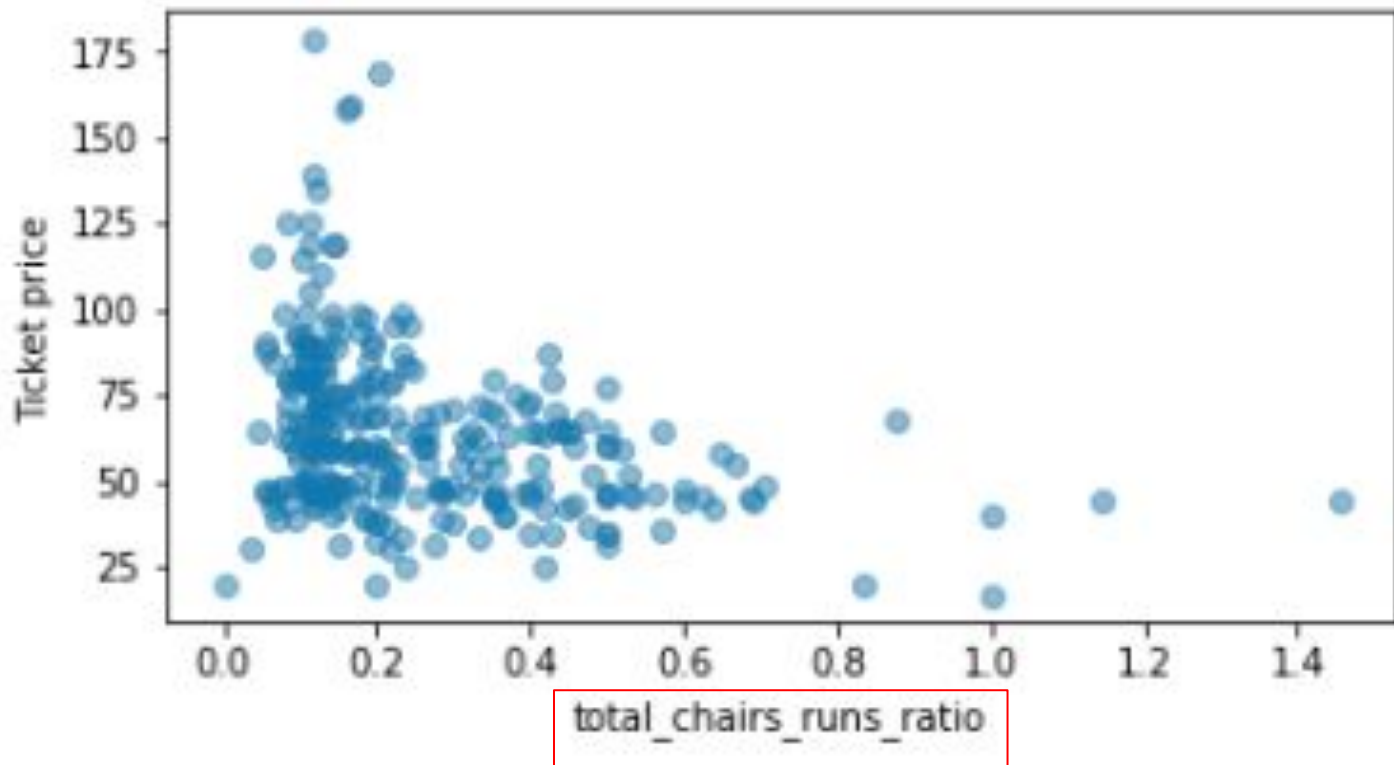
- During the Exploratory Data Analysis, **we did not see any clear pattern or grouping between state and ticket price due to a variance of 77%.**





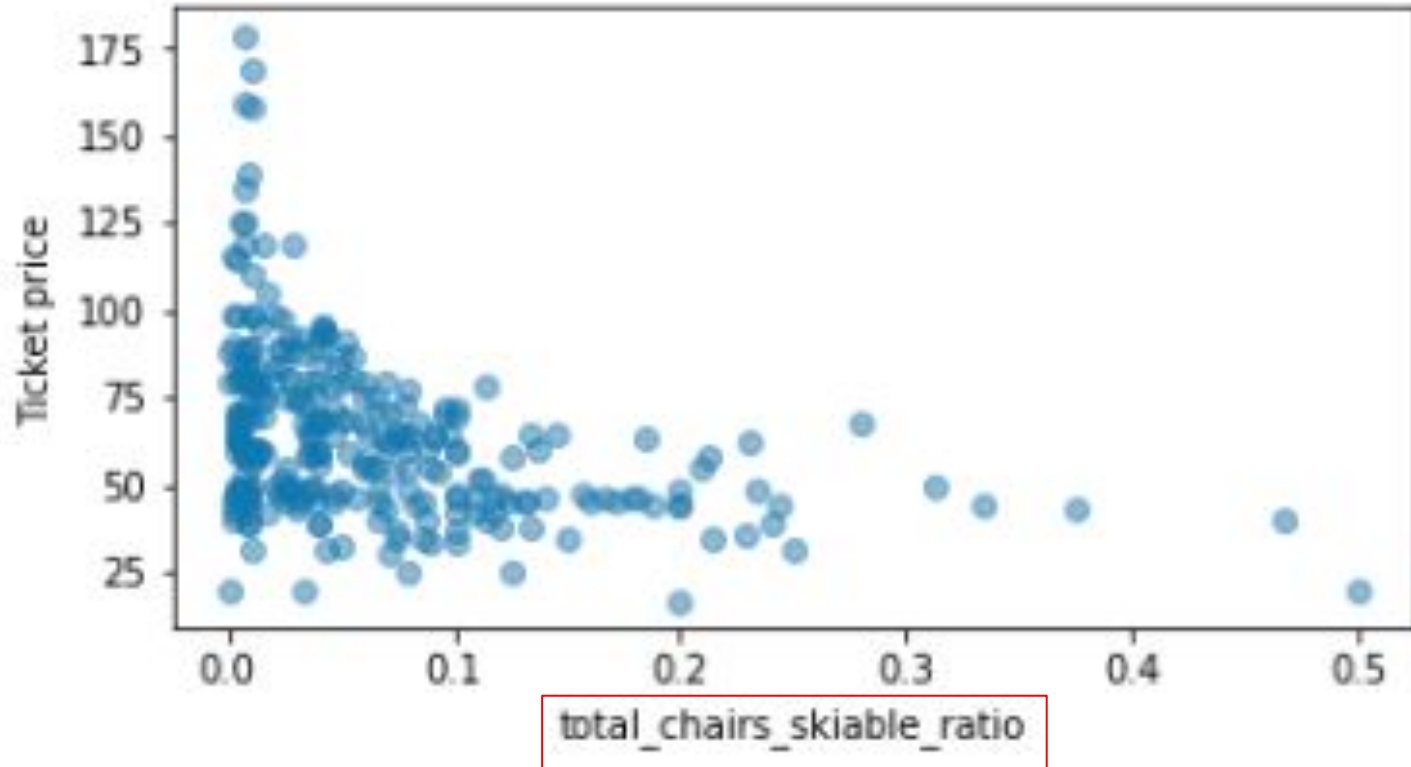
## Modeling Results and Analysis - Part 2

- However, we do see a high degree of correlation between total runs and the target value of the ticket price.



## Modeling Results and Analysis - Part 3

- As well as a high degree of correlation between total chairs and the target value of the ticket price.



## Summary and Conclusion

- When we compare Big Mountain's and its facilities with other resorts with relatively similar facilities, and the average prices of these competitors, the data tells us that **Big Mountain is most likely undercharging for its tickets in comparison to its competitors with similar facilities in the marketplace.**
- For future analysis, access to historical information about revenue and facilities would be very useful for the model for predicting the target price.