

Problem Statement Worksheet (Hypothesis Formation)

How can we increase revenue by 5% through calculated ticket prices and/or reduced operation costs.

1 Context

Big Mountain Ski Resort, Montana, added a new chair lift that increases operating costs by \$1.54M. The ski resort wants to increase their revenue by increasing ticket prices based on facilities and avg ticket prices of other resorts. Including the new ski lift, the resort has 14 Lifts, 2 T-bar lifts, and 1 magic carpet. Skiers have access to 105 trails (runs), the longest being 3.3 miles, and a 2353 ft vertical drop.

2 Criteria for success

Revenue is increased by 5% through calculated ticket prices and/or reducing costs of operation.

3 Scope of solution space

The focus is to determine a proper ticket price based on Ski Resort data from across the US.

4 Constraints within solution space

- **A wide data driven strategy might not be handled well with business analysts within the company.**
- **Business is seasonal which limits the time to collect data.**

5 Stakeholders to provide key insight

- Director of Operations, Jimmy Blackburn
- Database Manager, Alesha Eisen

6 Key data sources

CSV File - Provided by Database Manager

Key Findings

Big Mountains Current Ticket Price: \$81

Big Mountains Modeled Ticket Price: \$95.87

Positive Results

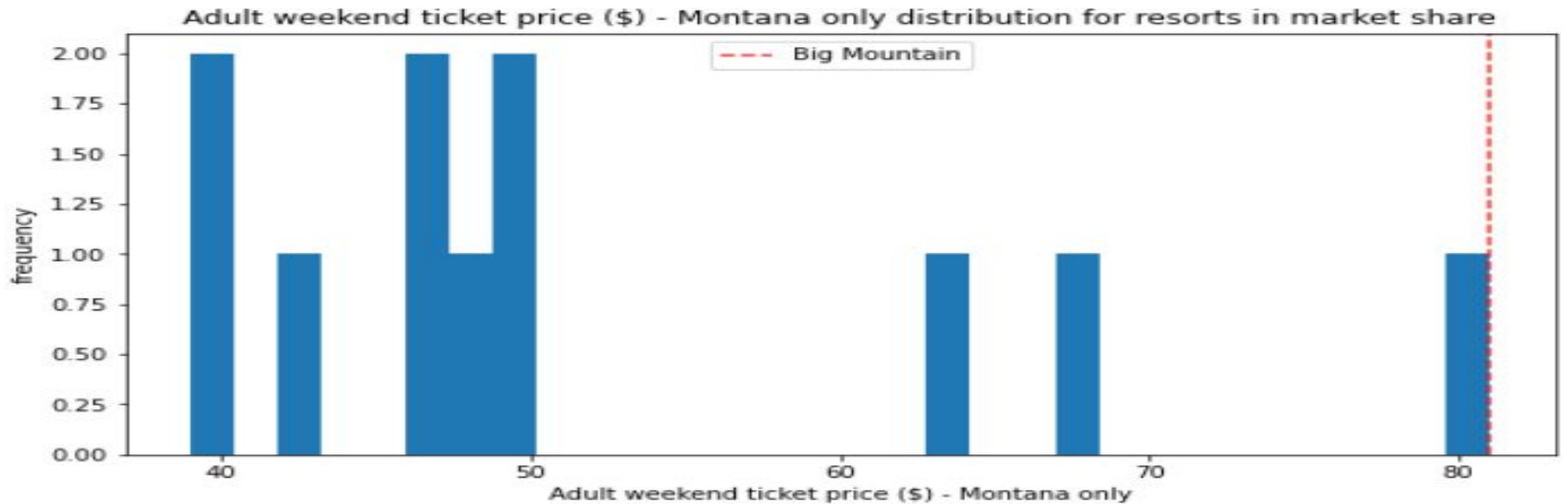
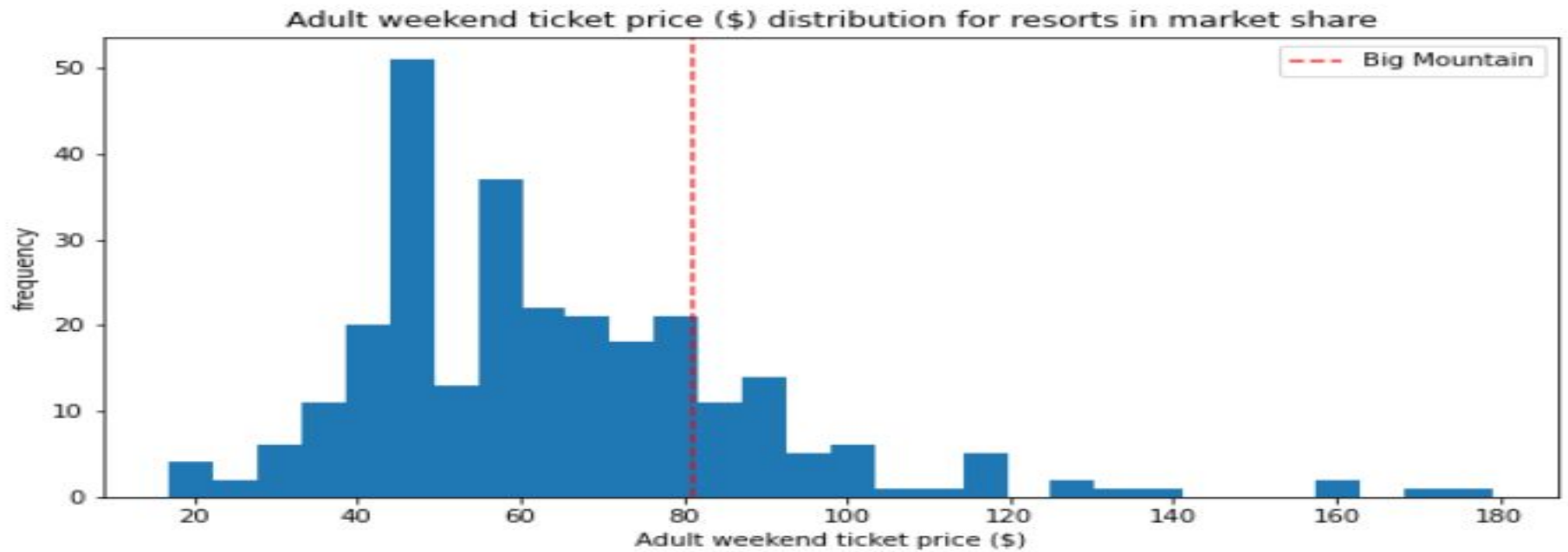
1. Add a run to increase maximum vertical drop by 150ft, then Increase the ticket price by \$2 At an expected visitor amount of 350k, this will result in a revenue increase of 3.5M.
2. Close down the least used run. The model suggests this would not be grounds for a reduction in ticket price.
3. Closing down 2 or 5 runs would support a reduction of \$0.40 or \$0.60, respectively, to ticket price. The reduction in operation costs could balance well over with the reduction in revenue.

Negative Results

1. Add 2 acres of snow making. Data suggest there is 0 increase to revenue.
2. Adding .2 miles to the longest run and guaranteeing the 4 acres is snow covered, also suggests a \$0 increase to revenue.

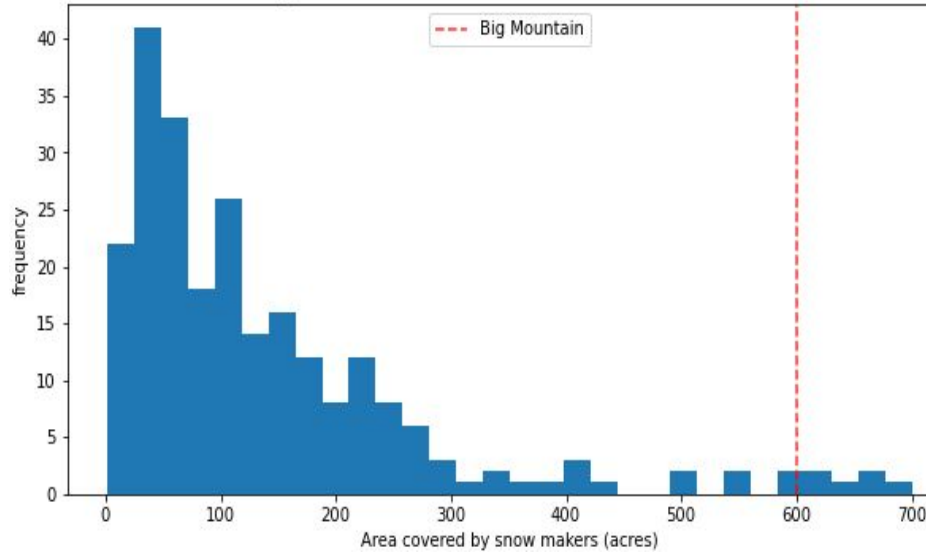
Comparisons

Ticket Price: Inter/Intra State

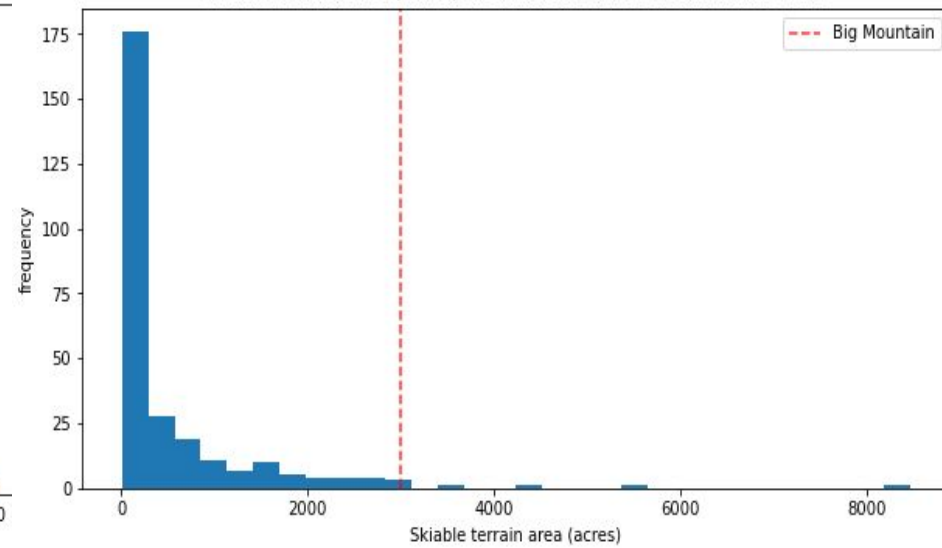


Vertical Drop/Snow Covered Area/Skiable Area

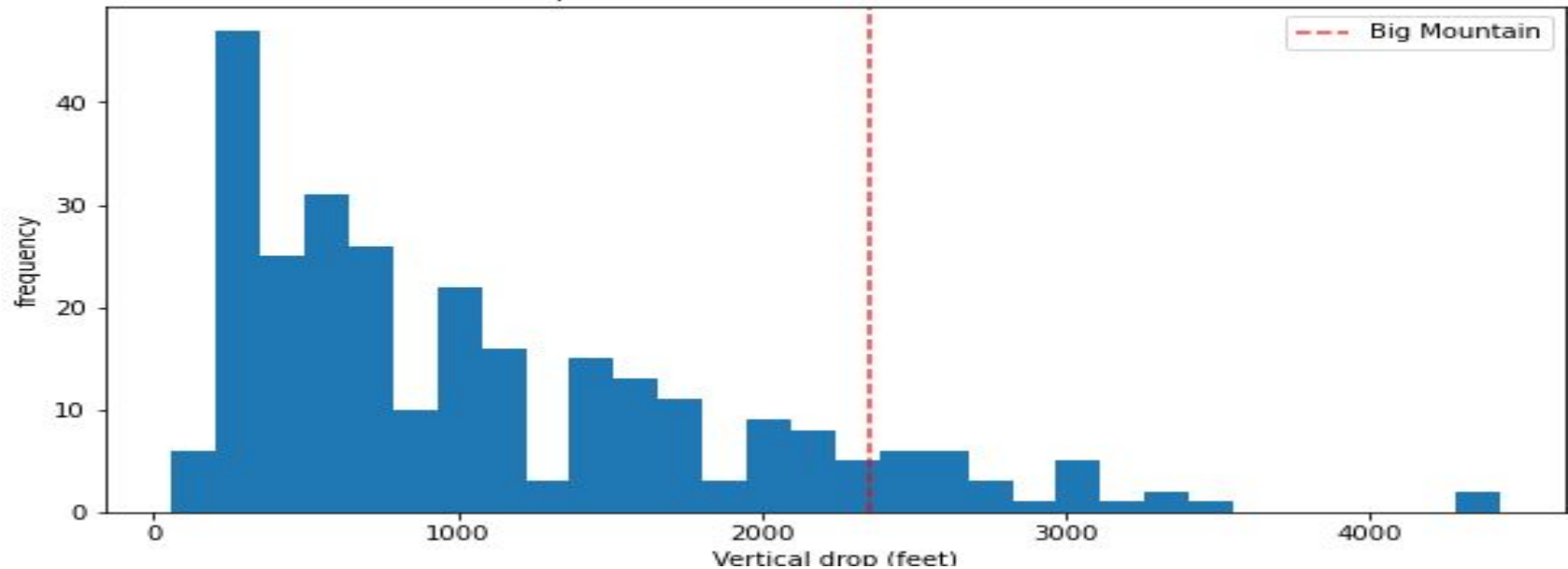
Area covered by snow makers (acres) distribution for resorts in market share



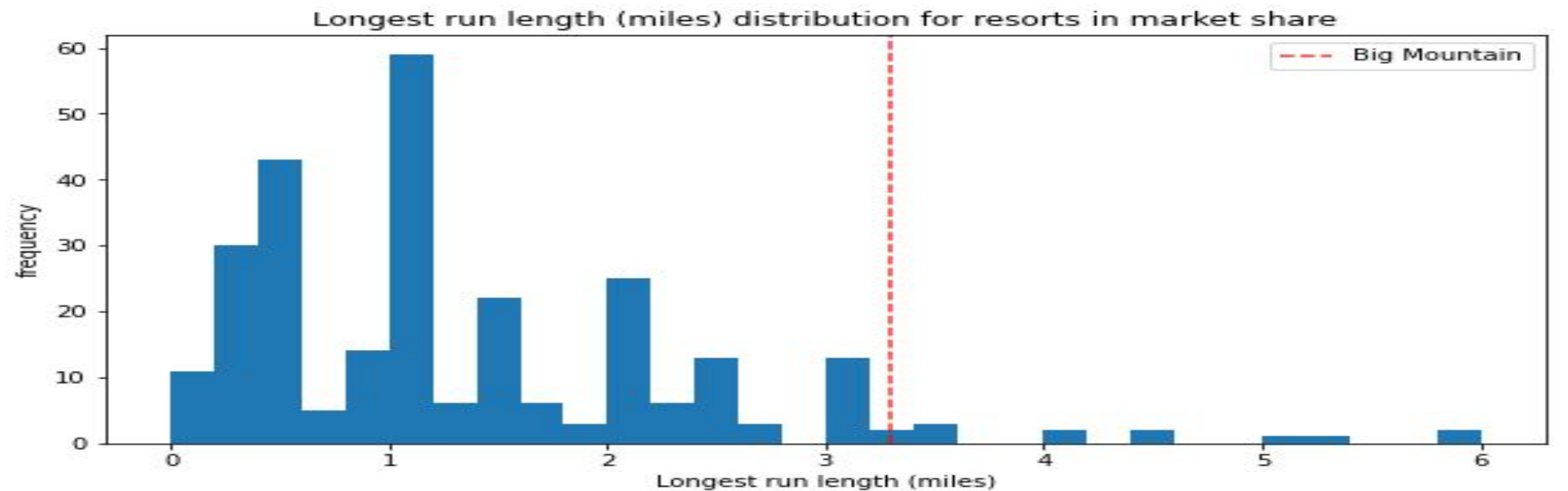
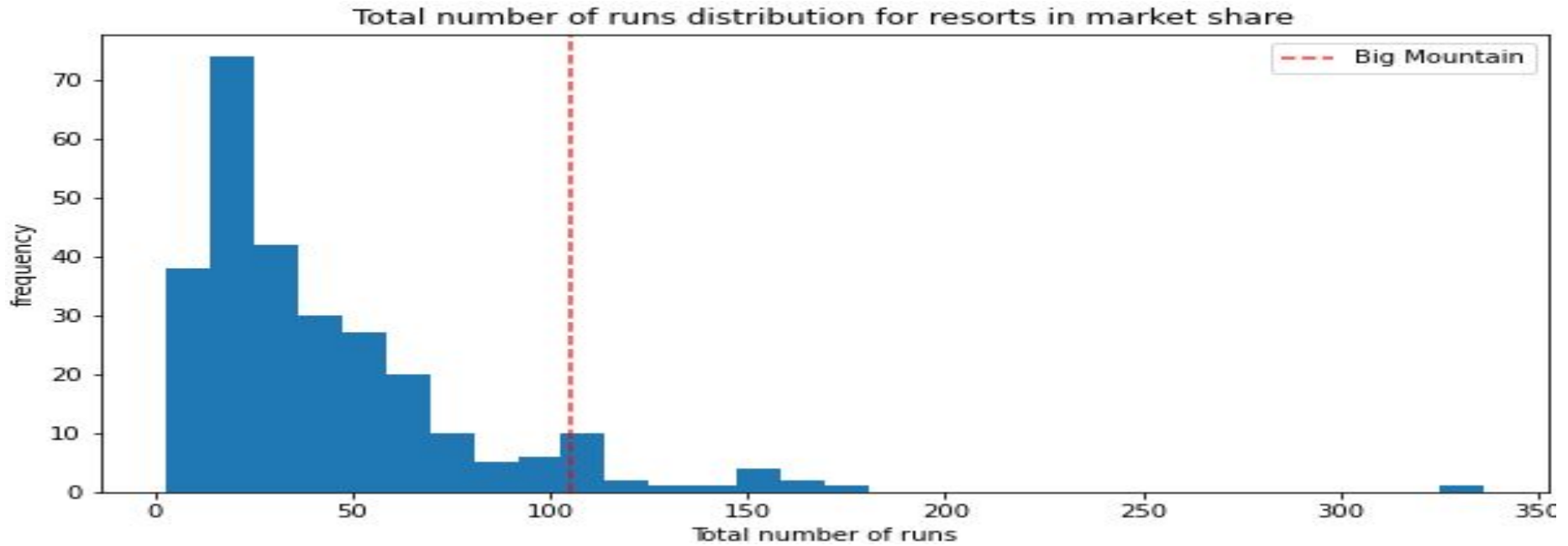
Skiable terrain area (acres) distribution for resorts in market share



Vertical drop (feet) distribution for resorts in market share

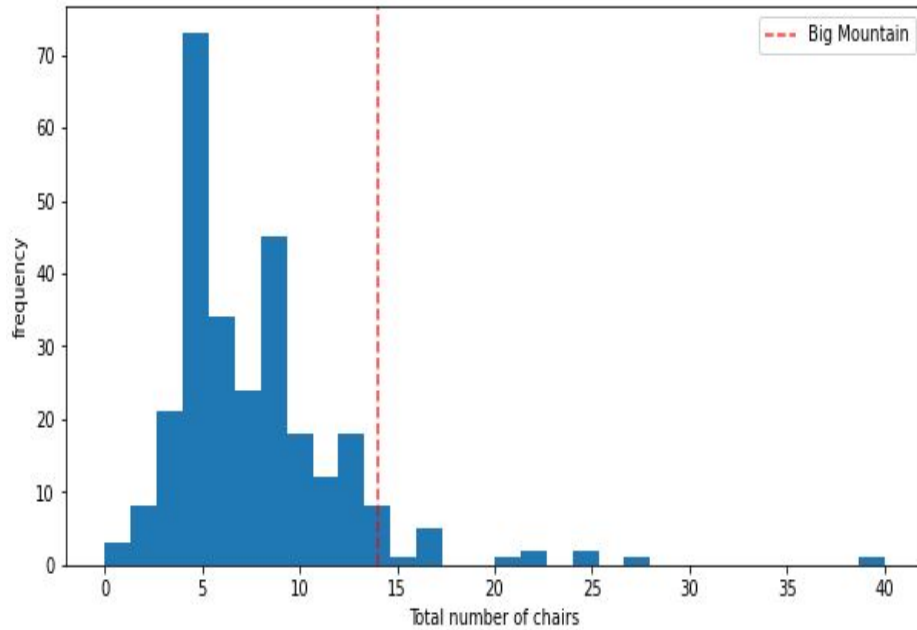


Total Runs/Longest Run

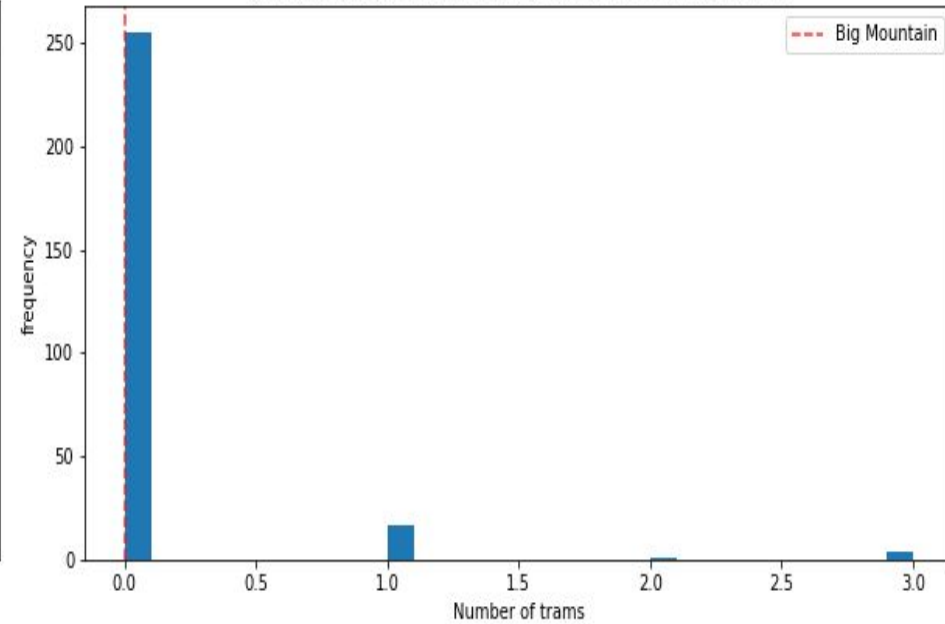


Chairs/Quads/Trams

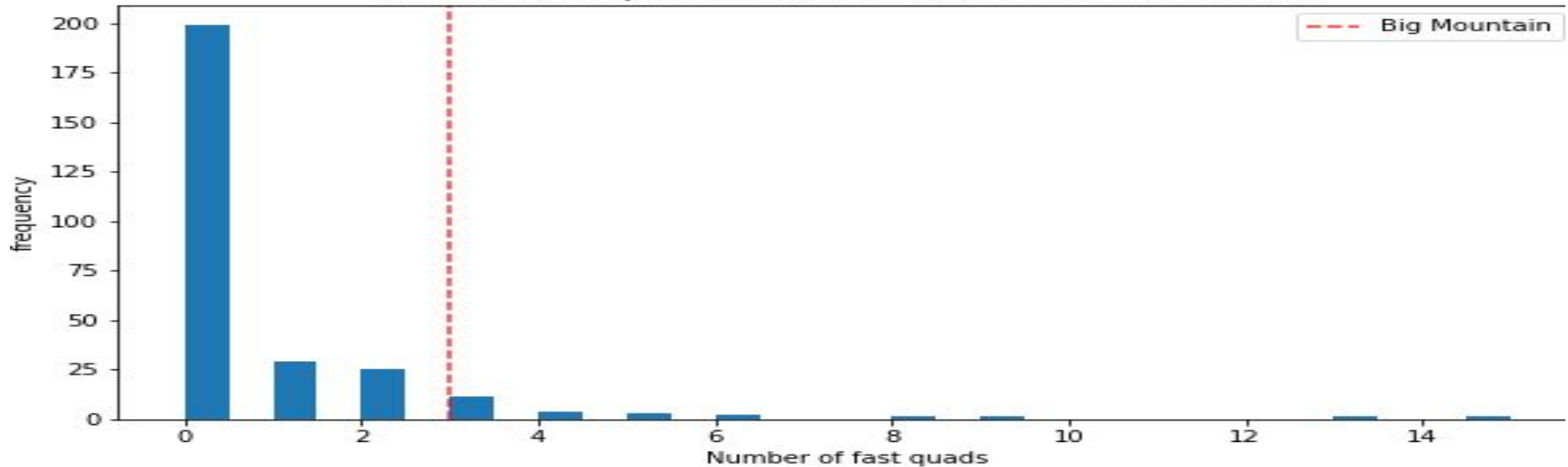
Total number of chairs distribution for resorts in market share



Number of trams distribution for resorts in market share



Number of fast quads distribution for resorts in market share



Big Mountain is clearly high up in the charts for almost all key features across all ski resort

This information could potentially be used as marketing material.

As far as ticket prices are concerned, there is definitely a lot of room for increase