



BIG MOUNTAIN RESORT, Montana

PROJECT FINDINGS



Big Mountain Resort

Main attractions:

- Spectacular views
- Chair Lift Runs
- Skiing
- Snowboarding



#1 NightSkiing facilities in Montana and neighbouring states

1 Most area for Snow Making Machines (in Montana)

2 Three person chair lifts in Montana

3 Average Snowfall (In Montana)

3 Total Chair Lifts

Problem Identification and Breakdown



Problem Statement Worksheet (Hypothesis Formation)

How to achieve revenue of atleast \$1,696,035 this year so that the required margins can be maintained while recouping the cost of the additional chairlift.

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1 Context

Big Mountain Resort (BMR), est. 1947, in Northwest Montana, offers their guests (of all skill levels) adventure sports activities like skiing and snowboarding as it has access to a wide variety of trails and has spectacular views. It gets quite a bit of footfall during the year and to cater to the demand it has installed an additional chair lift (costing \$15,40,000). With 9.2% profit margins, the costs have to be recovered soon.

2 Criteria for success

Atleast \$1,696,035* sales (revenue) from the skiing/ snowboarding activities to recoup cost and sustain margins.

* $\text{Revenue (reqd)} = \text{Cost} / (1 - \text{Margin (\%)})$

3 Scope of solution space

Assuming the same amount of people visit this year too (350,000), the revenue per person has to be \$4.86 to sustain margins and recover just the capex.
Revenue can be increased by increasing price or increasing the footfall.

4 Constraints within solution space

Overall Revenue and Pricing structure unclear. I can arrive at required revenue per person for the additional chairlift, but the data is insufficient to give a bird's eye view of the whole scope of activities.

Costs and revenue streams from other activities not available.

5 Stakeholders to provide key insight

Jimmy Blackburn, Director of Operations
Alesha Eisen, Database Manager

6 Key data sources

CSV file extracted by the Database Manager from SQL database/ S3 bucket

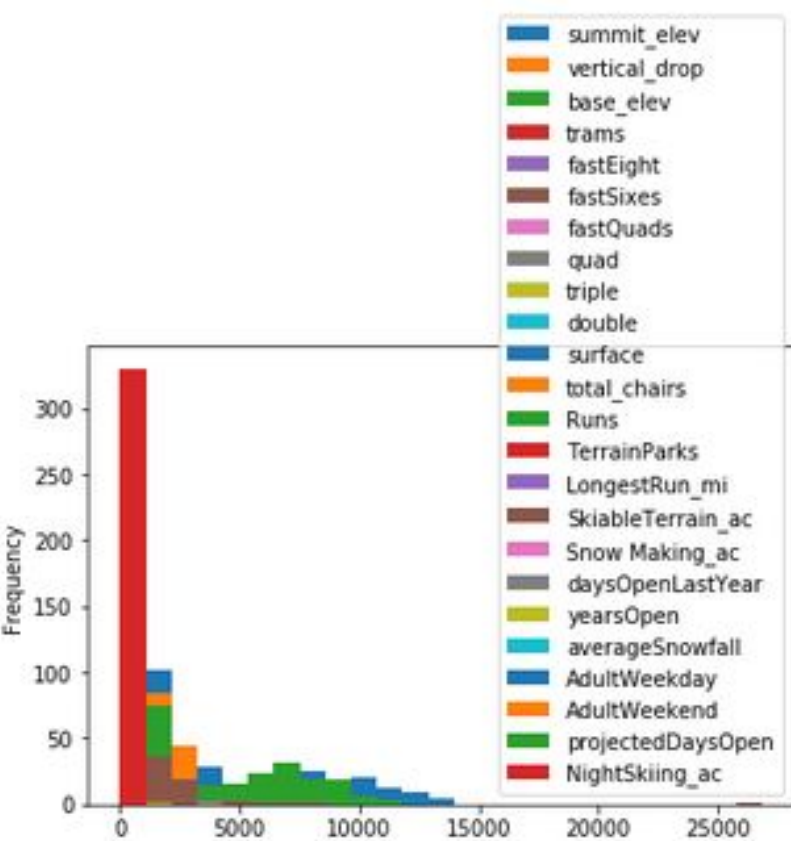
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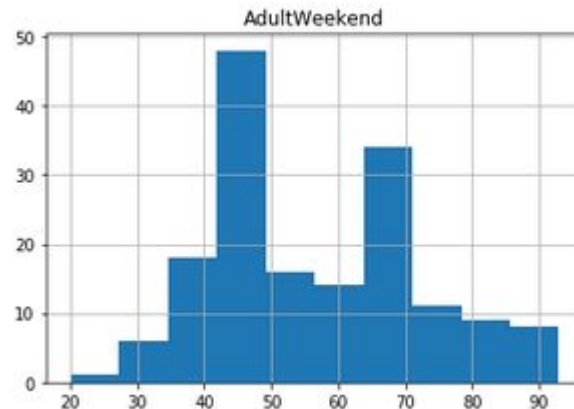
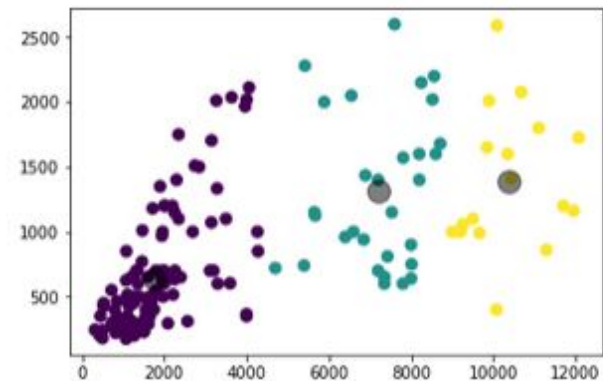
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Night Skiing has exceptionally high spikes. Big Mountain Resort has the biggest and most well lit NightSkiing trail

Highest Number of resorts are in **New York**, least in **Maryland**. **Montana** is on the 11th spot, in the middle.

The data follows three clusters. Big Mountain Resort is in Cluster 2.



The most common price is \$40-\$50 (all resorts included)

	Coefficient
AdultWeekday	20.229646
summit_elev	4.933824
base_elev	3.754470
vertical_drop	3.432703
Runs	1.706320
quad	1.696857
averageSnowfall	1.619698
clusters	1.205591
fastSixes	1.072904
surface	1.001387
triple	0.982694
NightSkiing_ac	0.943038
TerrainParks	0.896765
fastQuads	0.882700
trams	0.810258
total_chairs	0.776649
daysOpenLastYear	0.526324
Snow Making_ac	0.490824
double	0.309183
LongestRun_mi	0.302387
SkiableTerrain_ac	0.298677
yearsOpen	0.265337
projectedDaysOpen	0.203966
fastEight	0.020445

Key Findings

- Linear Regression Model was able to diagnose 90% of the variance in Price (AdultWeekend).
- Top 5 factors influencing AdultWeekend (Price) - **AdultWeekday, summit elev, base elev, vertical drop, Runs**

Recommendation

- Actual Price per ticket is \$81 (at present) which can be increased to \$90.87 as Big Mountain Resort has several competitive edges as compared to its peers.
- Price increase of approx \$9 will add **\$3,433,500 incremental revenue (assuming other costs constant)**