

Problem Statement Worksheet (Hypothesis Formation)

How can Big Mountain Resort increase revenue by at least 10% for next ski season through selecting a better ticket price and/or making several facility changes to cut costs or support a higher price?

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1 Context

Big Mountain Resort, a ski resort located in Montana, has recently installed an additional chair lift that increases their operating costs by \$1,540,000 this season.

The resort wants to select a better value for their ticket price to increase revenue. The current price is based on the market average (plus a premium), but Big Mountain is not capitalizing on its facilities as much as it could to set the price.

They are also considering several changes that will either cut costs without undermining the ticket price or will support an even higher ticket price.

2 Criteria for success

Next season, revenue growth from higher ticket prices and some facility reductions, deducting the costs of the additional chair lift and some future facility improvements, will be at least 10% compared to this season.

3 Scope of solution space

We will mainly focus on selecting a better value for the ticket price based on existing facilities and the recently installed chair lift. Changes to some facilities will be considered to cut costs or support the higher price but installing more new facilities is out of scope.

4 Constraints within solution space

- Raising the ticket price could lead to loss of customers, so the price cannot be set too high.
- We need to constrain the costs of facility improvements.

5 Stakeholders to provide key insight

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

6 Key data sources

- A CSV file provided by Database Manager. It contains information from 330 resorts in the US that can be considered part of the same market share. Data includes:
 - name and location of each resort;
 - elevation and vertical drop of each resort;
 - number of facilities, such as trams, fast chairs, regular speed chairlifts, runs, and terrain parks;
 - other features, such as skiable area, snow-making area, annual snowfall, night skiing area, open days, and open years;
 - weekday and weekend chairlift prices;

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