

# Problem Statement Worksheet (Hypothesis Formation)

**Will Big Mountain Resort keep its profit margin at 9.2% after the addition of a new chair lift by increasing the resort's ticket prices and/or operating days?**

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## 1 Context

Big Mountain Resort, located in northwestern Montana, offers access to 105 named trails and vast bowl and tree skiing, serviced by 11 lifts, 2 T-bars and 1 magic carpet for novice skiers. The terrain rating consist of 12% beginner, 38% intermediate, 44% advanced and 6% expert. The Resort has recently installed additional chair lift, which increased their operating costs by \$1,540,000 this season. The investors desire to keep the business profit margin at 9.2% after the addition of the new chair lift.

## 2 Criteria for success

New ticketing prices and/or projected open days should be implemented before the start of next season to ensure the profit margin at 9.2%.

## 3 Scope of solution space

An optimal open days should be implemented based on the state for coming up season to ensure the resort's maximum gain. New lifting ticketing price(s) may be applied to weekday and/or weekend to increase margin while matching competitors' pricing.

## 4 Constraints within solution space

The data provided does not have any way to find out how many people visited/purchased the ticket on weekday/weekends and also which days of the year. These are important information required to find out the optimal pricing and operating days.

## 5 Stakeholders to provide key insight

Jimmy Blackburn – Director of Operations  
Alesha Eisen – the Database Manager

## 6 Key data sources

CSV file provided by Alesha Eisen, the Database Manager. Key data will be the following  
State, all chair lifts, number of runs, days opened last year, average snowfall, ticket prices, projected open days for coming up season.

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