Big Mountain Ski Resort Ticket Prices: Problem Identification

US Ski Resorts and Big Mountain Ski: a comparative regression analysis of ticket prices in North American Ski Resorts and the effect size of specific facilities or features

1 Context

Big Mountain Ski Resort needs to understand whether their ticket pricing is adequately backed by the market value of the kinds of facilities and features they offer at their resort. They require a data-driven analysis of the US ski resort market, and this analysis should yield an understanding of how to maximize their profits on ticket sales by charging a fair price to encourage more purchases, but make sure that they limit expensive features in the resort that don't actually support a higher price.

2 Criteria for success

A clear understanding of the predictors of US ski resort ticket prices that yields actionable insights into the features of Big Mountain Resort that have the most influence upon the ticket price model. An actionable insight may be a purchase that will allow Big Mountain to charge higher prices, or a way to reduce expenses by removing certain features in order to reduce costs of operations, thereby increasing profit margins.

3 Scope of solution space

The first priority is to use date from US ski resorts to better understand factors that may influence ticket prices. These factors would include region and state, elevation and total property size, the number of ski runs and their length, or the number or type of trams and lifts

4 Constraints within solution space

The data is limited in terms of demographics and economics. The visitor purchase history or ticket purchasing trends during the year or across multiple years are not available. We also have no demographic or economic data on either the visitors or the states and regions that the resorts are in, nor do we have access to information about the costs of operation. This will not allow us to make a complete financial analysis. Instead our analysis will only be on skiing related facilities, elevation, general location, and the size of the resorts.

5 Stakeholders to provide key insight

On this project I will be working directly with the COO, Jimmy Blackburn, and the Database Manager, Alesha Eisen. I will send my findings to them or meet with them. They will then send any valuable insights or necessary documents to the client, Big Mountain Ski resort.

6 Key data sources

I will be using a csv file that contains all the relevant data, so I will not need to mine or obtain that myself. There are several relevant variables, so I will need to begin by cleaning those up and then understanding basic descriptive statistics and correlations. I will most likely conduct several regression analyses in order to find the strongest predictors of US market prices. I will then use those to understand how certain features at B ig Mountain may or may not support their ticket prices and where to go from there.