

Big Mountain Resort Preliminary Analysis

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Big Mountain Resort has recently installed an additional chair lift to help increase the distribution of visitors across the mountain. The business wants to hear recommendations for recouping this cost this season and get some idea of what the annual revenue needs to be to make that happen. Big Mountain suspects it may not be maximizing its returns, relative to its position in the market. It also does not have a strong sense of what facilities matter most to visitors, particularly which ones they're most likely to pay more for. This project aims to build a predictive model for ticket price based on a number of facilities, or properties, boasted by resorts.

Data

The data consists of a single csv file from Alesha Eisen, the Database Manager. This data file includes 27 attributes of Big Mountain, as well as another 300+ ski resorts from their competitor market. The attributes include the names of the resorts, number of chair lifts, elevations, ticket prices, etc.

Methods and Analysis

Initial analysis of the data revealed that 13 of the 27 columns in the spreadsheet had missing data. Appropriate fill methods were identified and applied. The data contains some ticket price values, but with a number of missing values that led to several rows being dropped completely. There are two kinds of ticket price. There are also some obvious issues with some of the other features in the data that led to one column being dropped, a data error corrected, and some other rows dropped. I obtained some additional US state population and size data with which to augment the dataset, which also required some cleaning. The data science problem identified is to predict the adult weekend ticket price for ski resorts.

Conclusion / Next Steps

Montana is the third largest state in this market. California dominates state population figures and comes in second. New York comes in first and leads in number of parks.