## Introduction

Using a dataset on Ski Resort facilities across the United States, we have designed a model that accurately predicted what a typical Ski pass ticket price would be. Using our model, we find that Big Mountain could significantly increase their bottom line by implementing more in the areas of adding more vertical drop, some runs, and chairs.

?graph?

In the following figures we show Big Mountain Resort is a top performer in amount of facilities offered among resorts nationally and within their state of Montana.

## Results

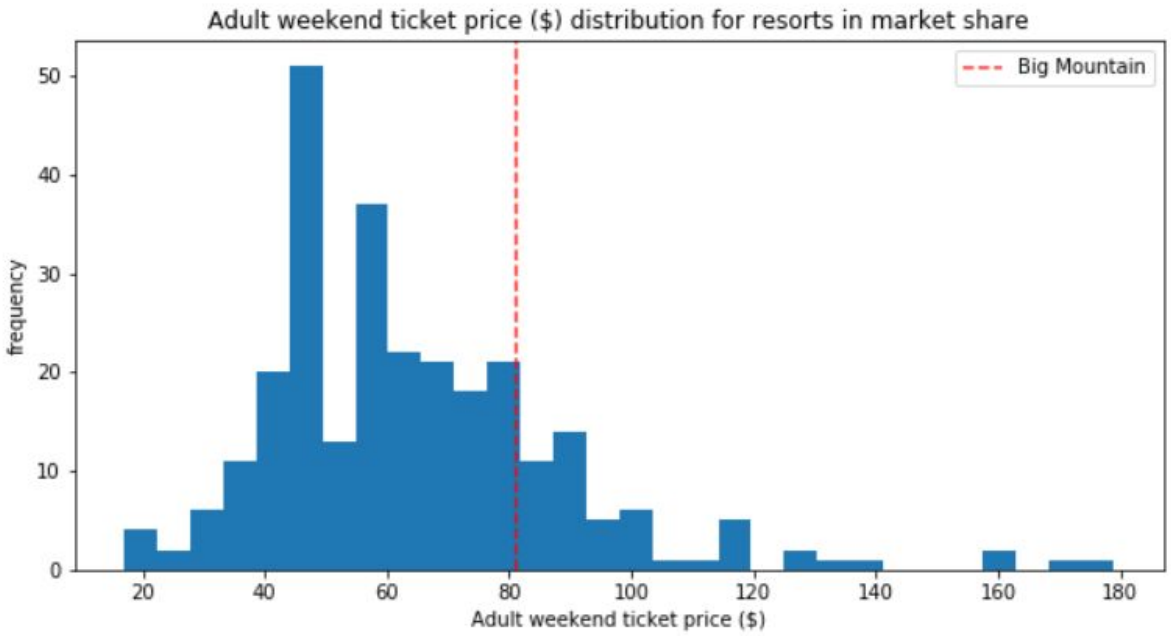


Figure 1. Adult weekend ticket price nationally

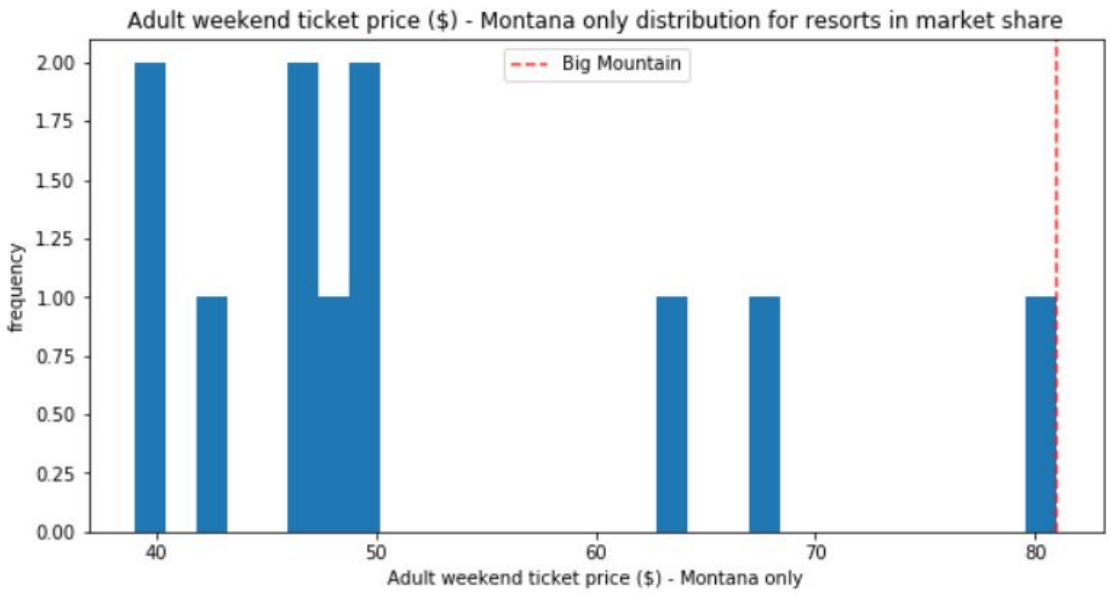


Figure 2. Adult weekend ticket price in Montana

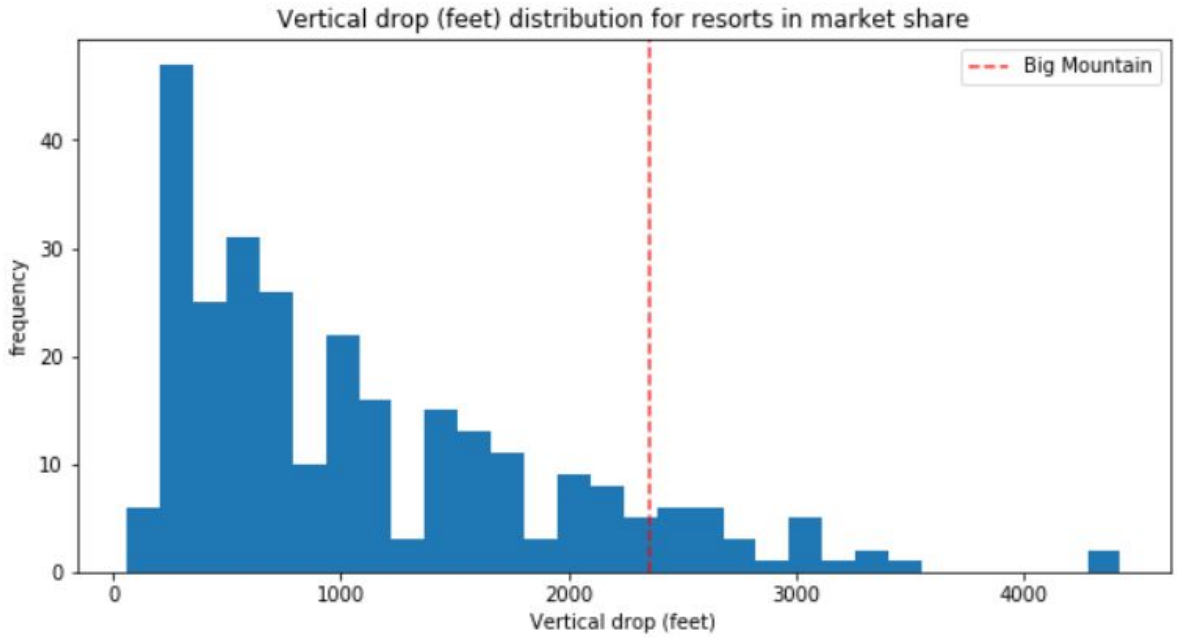


Figure 3. Vertical drop

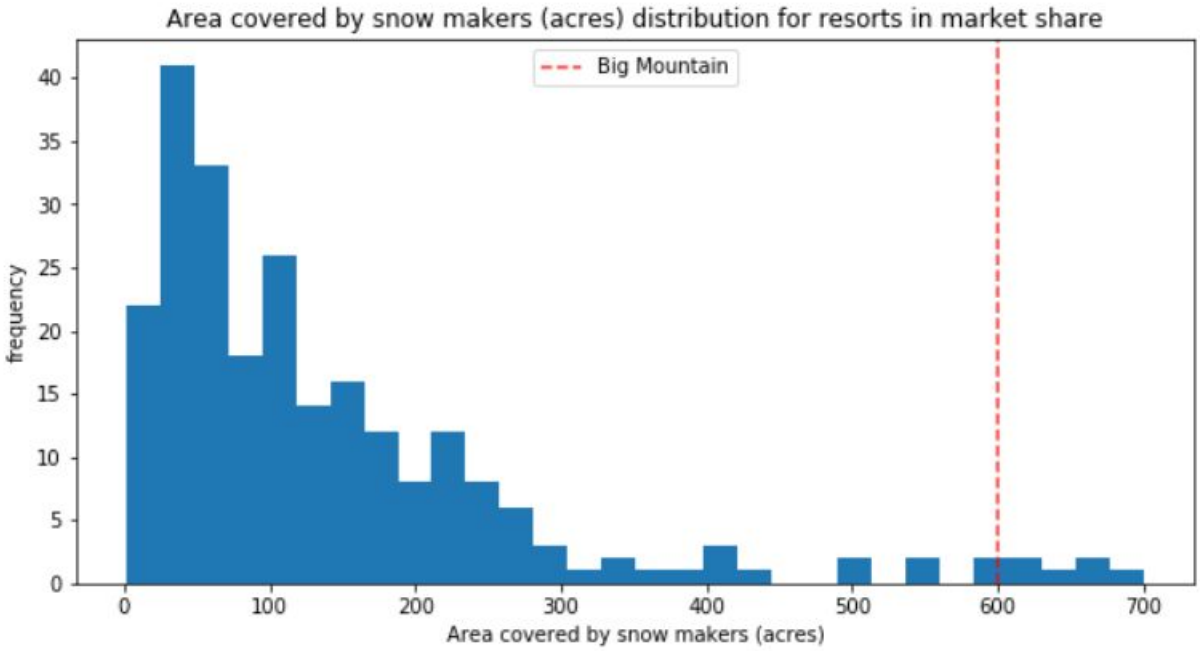


Figure 4. Area covered by snow makers

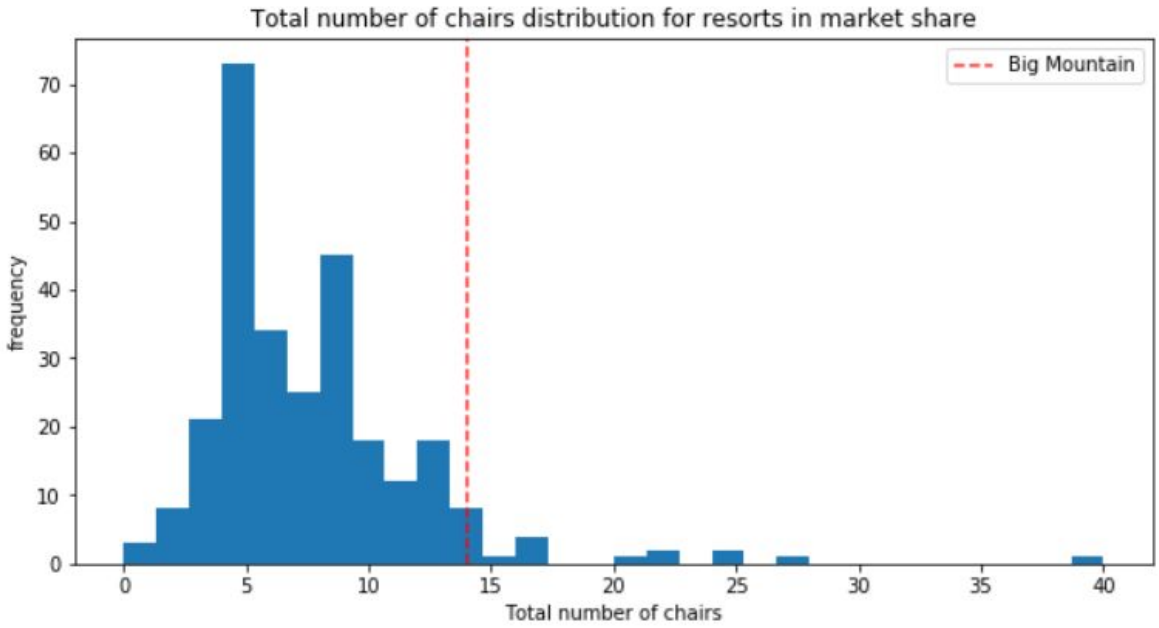


Figure 5. Total number of chairs

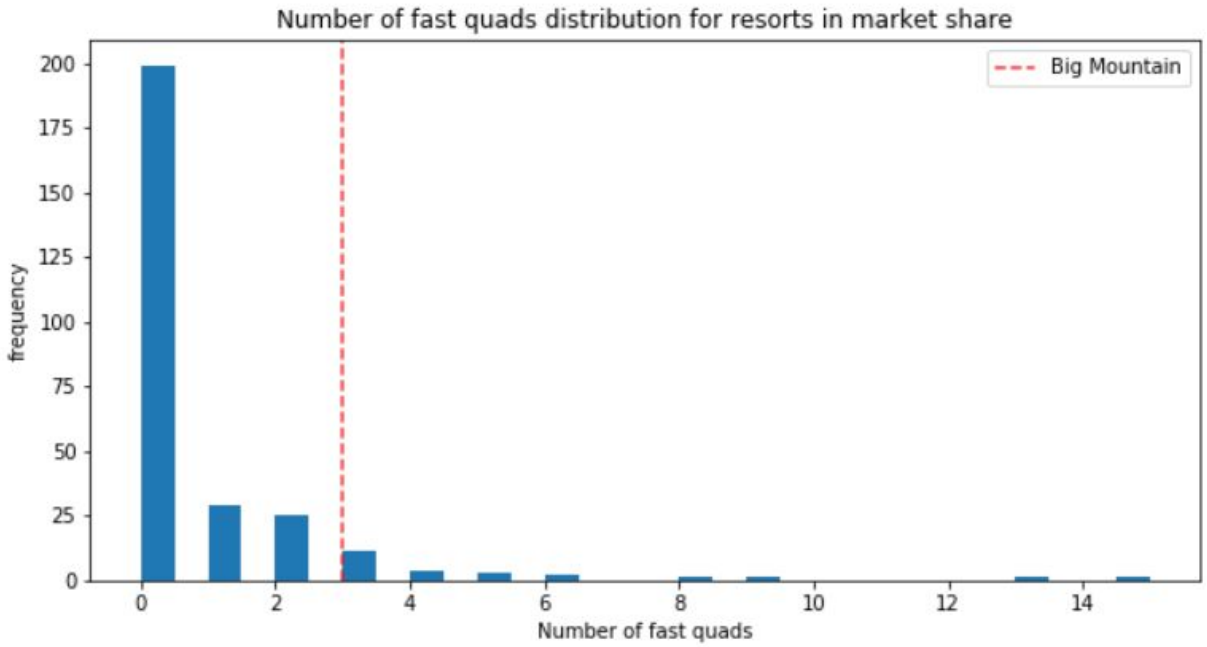


Figure 6. Number of fast quads

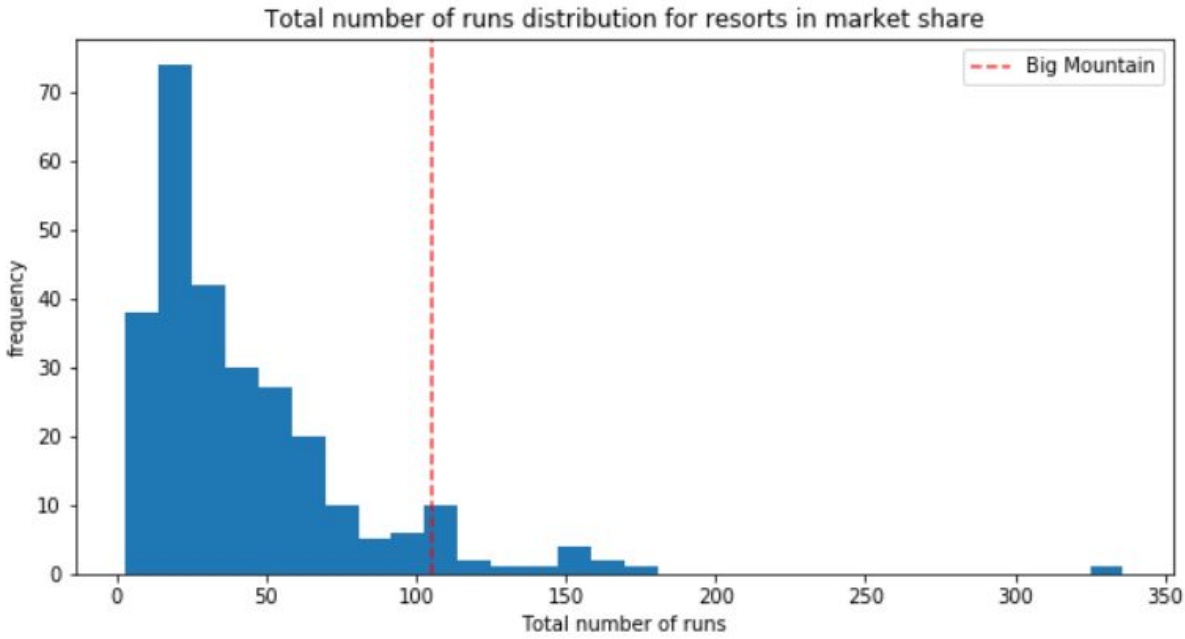


Figure 7. Total number of runs

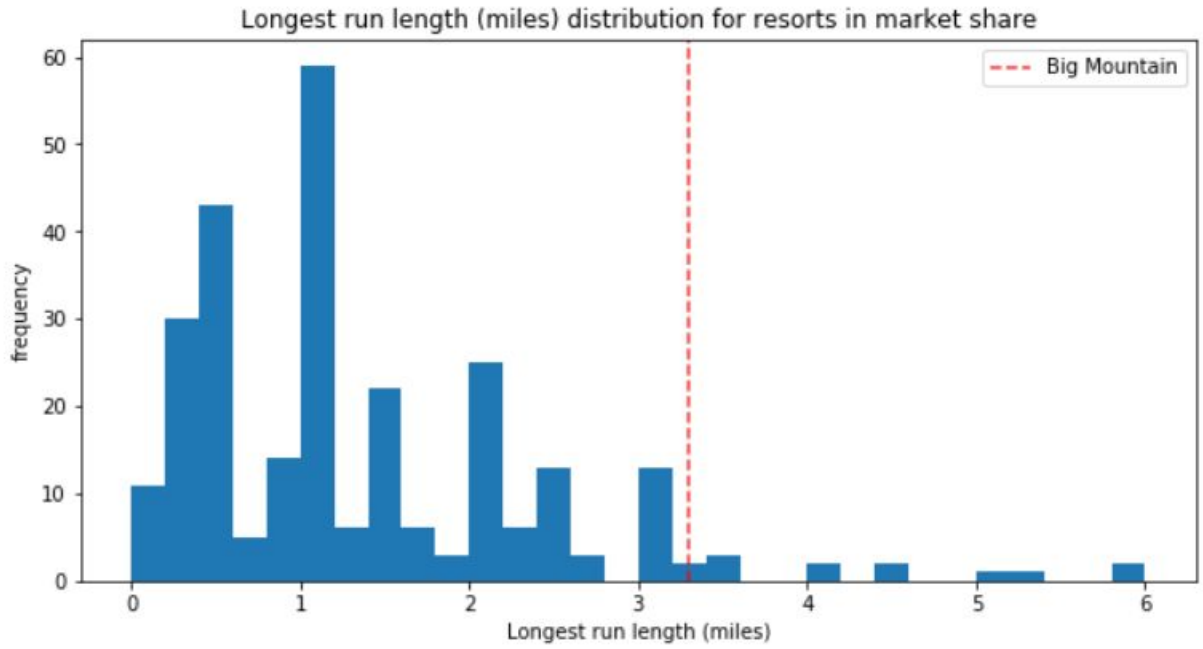


FIgure 8. Longest run length


Figure 9. Number of trams

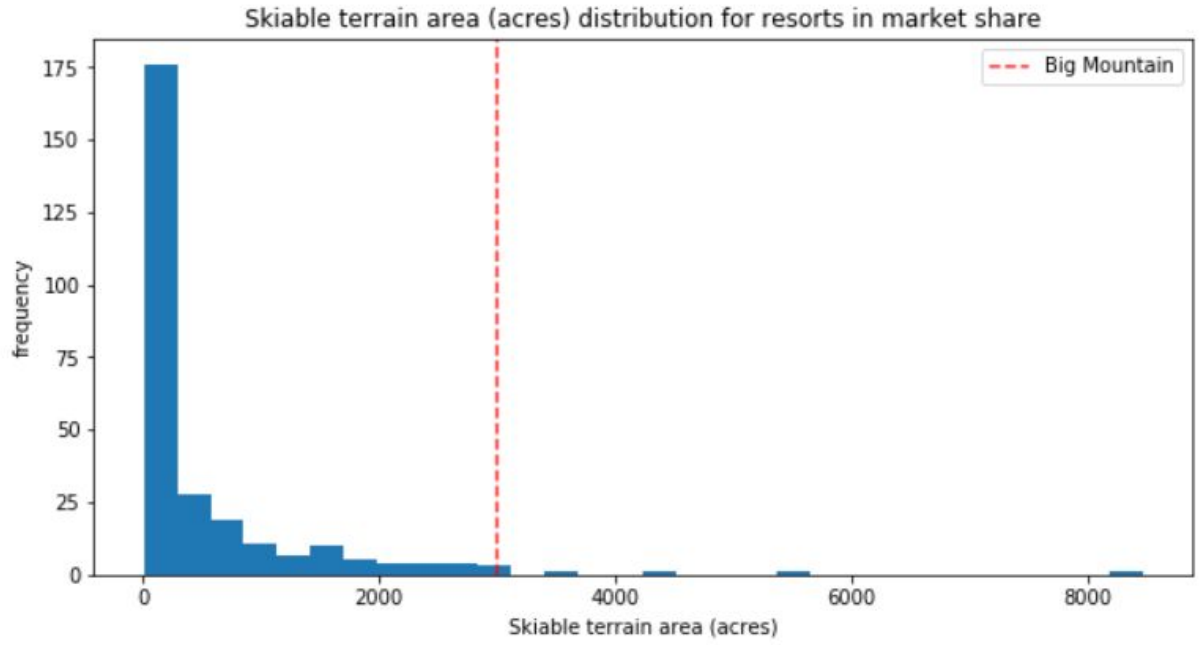


Figure 10. Skiable terrain area

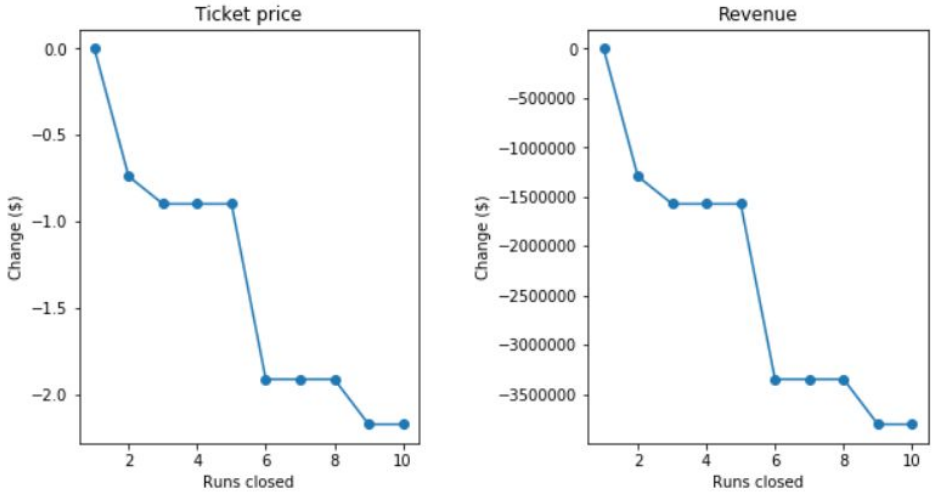


Figure 11. Runs closed vs Ticket price and Runs closed vs Revenue.

As shown in Figure 11., decreasing the Big Mountain Resort's number of runs can result in a susceptibility to decreasing ticket price and revenue. It should be noted this can occur in stages such that a decrease to three (3) runs has the effect of decreasing to five (5) runs.