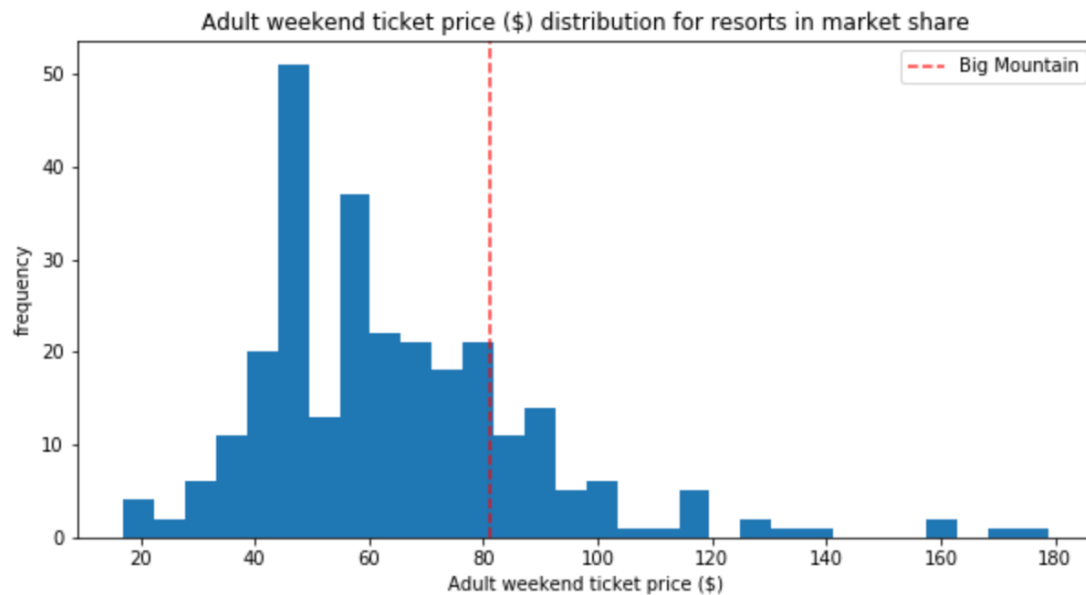**Guided Capstone Project Report**

Recommendations

- The model indicates that pricing in Big Mountain Resort is lower than predicted model around 16% (Table 1.1).

  Table 1. 1 Adult weekend ticket prices

- Based on preprocessing and training we could say that following features would be considering for modeling:
  - **vertical_drop**: Big Mountain is doing well for vertical drop, but there are still quite a few resorts with a greater drop.
  - **Snow Making_ac**: Big Mountain is very high up the league table of snow making area.
  - **total_chairs:** Big Mountain has amongst the highest number of total chairs, resorts with more appear to be outliers.
  - **fastQuads:** Most resorts have no fast quads. Big Mountain has 3, which puts it high up that league table. There are some values much higher, but they are rare.
  - **Runs:** Big Mountain compares well for the number of runs. There are some resorts with more, but not many.
  - **LongestRun_mi:** Big Mountain has one of the longest runs. Although it is just over half the length of the longest, the longer ones are rare.
  - **trams:** Big Mountain has no trams but neither of the majority of resorts.
  - **SkiableTerrain_ac:** Big Mountain is amongst the resorts with the largest amount of skiable terrain.

- Not all of these features would impact the ticket prices based on our model. Still, there are a couple of ways to increase profitability, either by cutting the costs or raising the income by increasing the ticket prices.

  Some profitability scenarios are as follows:

  - Increasing the vertical drop would contribute the profitability by increasing the ticket prices around 10%. The potential revenue increase is around $15M.
  - Increasing snow terrain would increase the ticket price by 12%, which cause a revenue increase by $17M.

  We also checked what would be the result of closing runs.

  - There would be no change on ticket prices or revenues after closing one run. Therefore, Big Mountain Resort might consider closing on run to decrease maintenance costs.
  - However, closing 2 and 3 runs would decrease the revenue by $750,000 and $1.25M respectively.
  - There would be no difference between closing 3 – 5 runs. Hence, we would make a comparison if it is worth to close some runs. However, to do that we need some more data regarding maintenance costs.