Big Mountain Ticket Pricing Strategy

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Executive Summary

Problem Statement

Can Big Mountain increase its ticket price and utilize better its facilities in order to increase profits to offset the $1.54 mill/year increase of its operational costs?

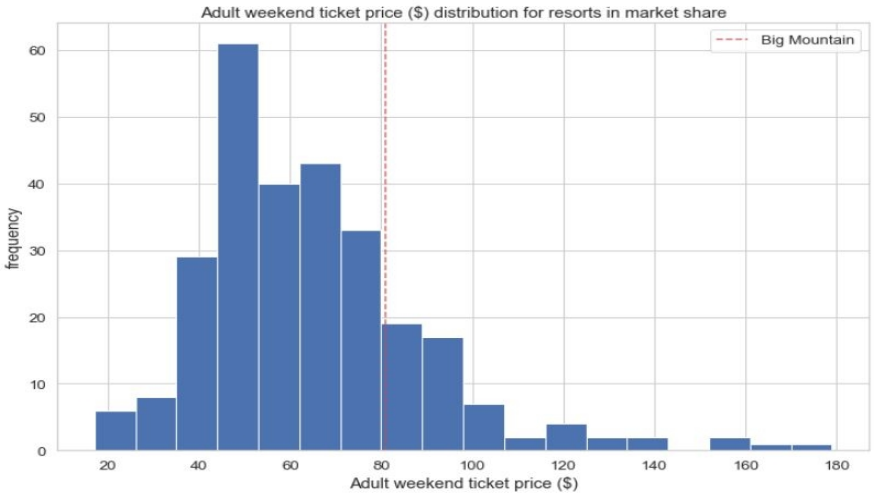
Recommendations Based on Data Analysis and Model Predictions

- Ticket price increase:
  - ✓ Model supports Big Mountain ticket price increase to $94 from the current price of $81
    For determining optimal price additional data gathering, analyses and model tuning are needed
- Cost-cutting actions:
  - ✓ Model supports closing the least utilized run without any change in ticket price
    Can be implemented immediately and will provide cost savings (amount TBD) without any loss in revenue
  - ✓ More aggressive approach → close five of the least utilized runs and reduce ticket price by $1.99
    Trade-off analyses are needed to determine whether cost savings from closing these facilities exceed losses from ticket price reduction
- Profit-increasing actions:
  - ✓ Model supports the addition of one run with increased vertical drop (150 ft) and a chair lift for ticket price increase of $1.99
    This scenario requires significant funds and time to be implemented and, thus, requires additional analyses

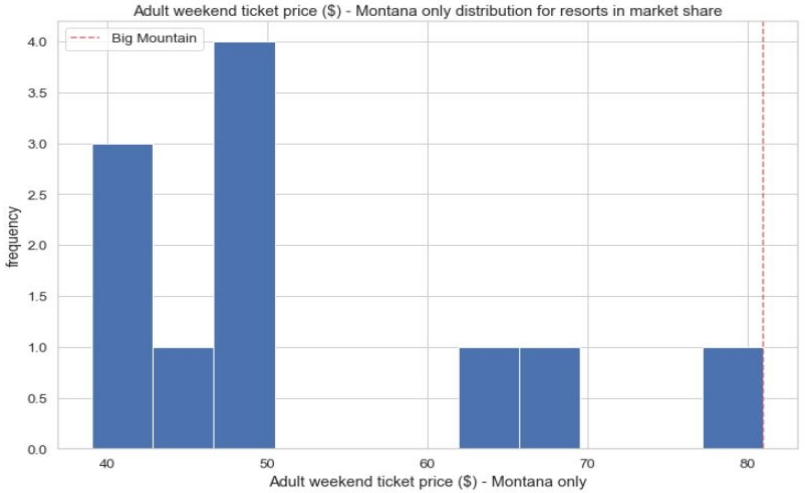
I. Problem Identification

Big Mountain Market Position: Current Ticket Price

- Comparison with USA resorts in the market segment → top 20 %



- Comparison with Montana resorts in the market segment → top 1 %



Problem Definition

- **Problem**
  Recently, Big Mountain has installed new chair lift which has increased its operational costs by $1.54 mill. per year

- **Question**
  Can Big Mountain increase its ticket price and by how much to offset the added operational costs and create as much profit as possible? Are there better ways to utilize its facilities?

- **Risk**
  Big Mountain current ticket price is already in the top 20 % in the country and the highest in the state of Montana. Increasing ticket price could price out the resort from competing in the market which will lead to long-term loss of customers and, in turn, revenue

- **Task**
  Analyze market segment ticket pricing and facilities to determine optimal ticket price and facilities utilization for most profit while being competitive in the market

II. Key Findings and Recommendations

Ticket Pricing: Facilities Contraction *vs.* Expansion

- **Main Finding**
  - ✓ Model supports ticket price increase from $81 (current) to $94 (new)

    Further analysis and model tuning are required to determine the optimal ticket price increase

- **Cost-cutting Strategy via Facilities Contraction**
  - ✓ Minimalist strategy: Model supports closing the least used run without change of price.

    This will reduce operational costs (amount TBD) without affecting revenue
  - ✓ Aggressive Strategy: Close five of the least used runs and reduce ticket price by $0.70.

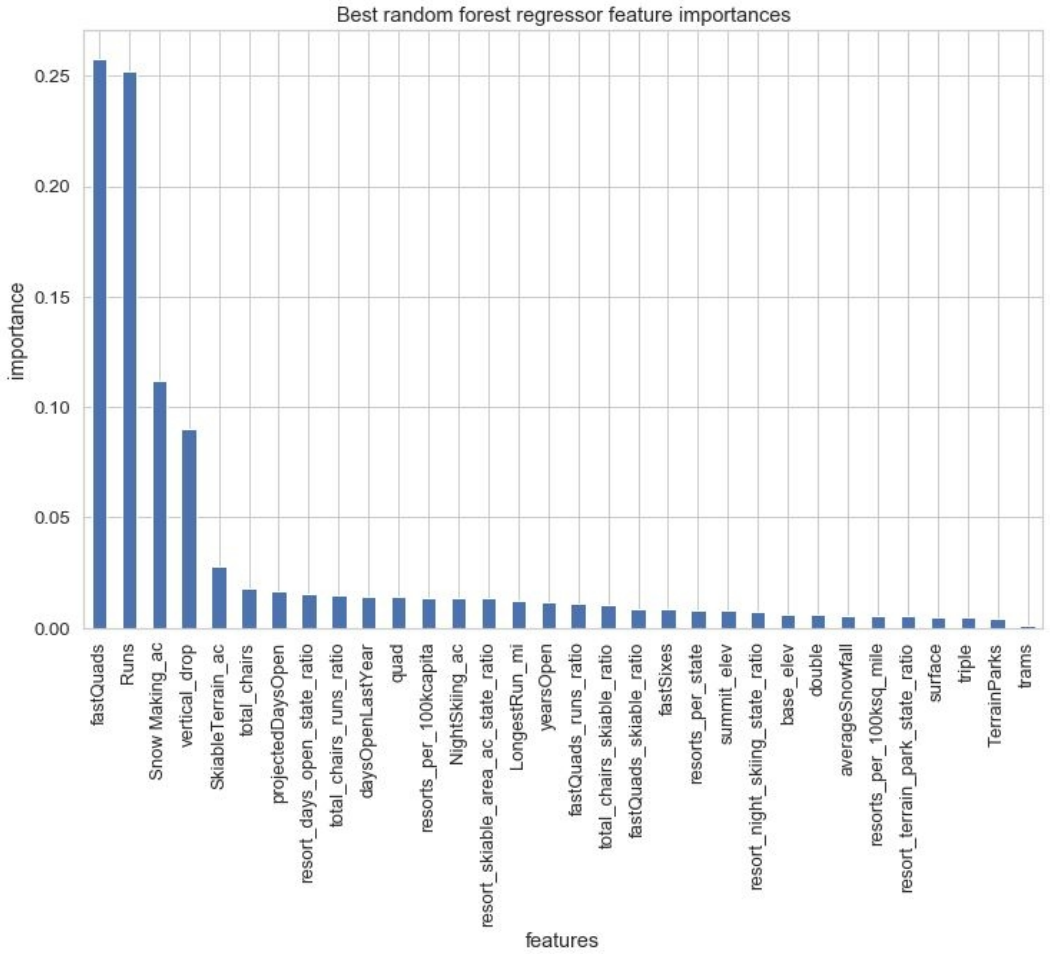
    Trade-off analyses are needed to determine whether the reduction of operational costs (amount TBD) will offset the estimated revenue loss of $1.2 mill.

- **Revenue-increasing Strategy via Facilities Expansion**
  - ✓ Adding a run to increase vertical drop by 150 ft and a chair lift for this run justifies ticket price increase by $1.99. Results in estimated revenue increase of $3.5 mill. per year (based on 350,000 visitors per year skiing five days on average).
  - – *Requires significant investment and time and, thus, requires additional analyses*

III. Model Results and Analysis

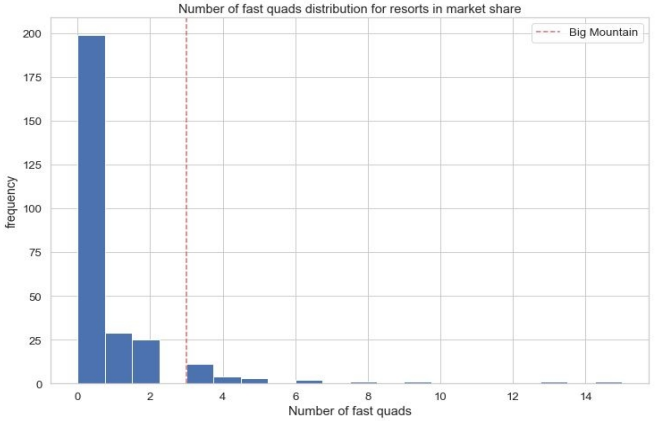
Resorts Feature Importance

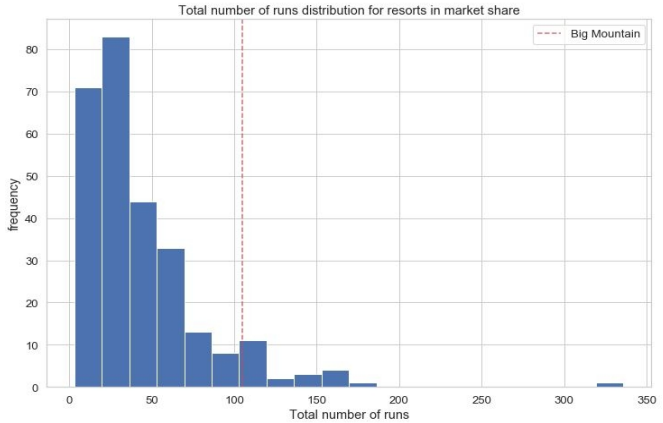
- Most important resort features according to model
  - ✓ Fast quads (weight of 0.26)
  - ✓ Runs (weight of 0.25)
  - ✓ Snow making area (weight of 0.11)
  - ✓ Vertical drop (weight of 0.09)
- These features are the focus in creating possible scenarios for ticket price increase

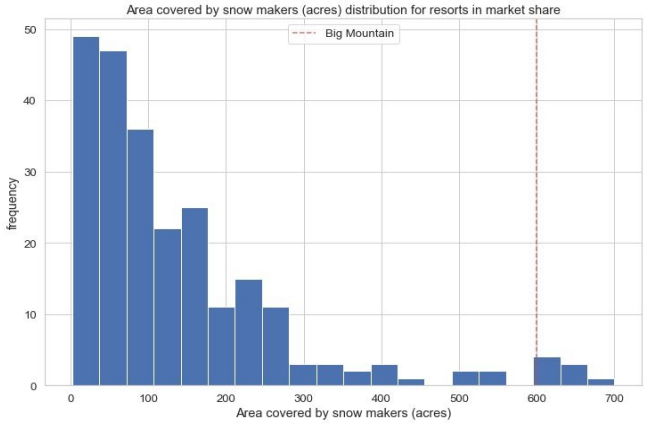


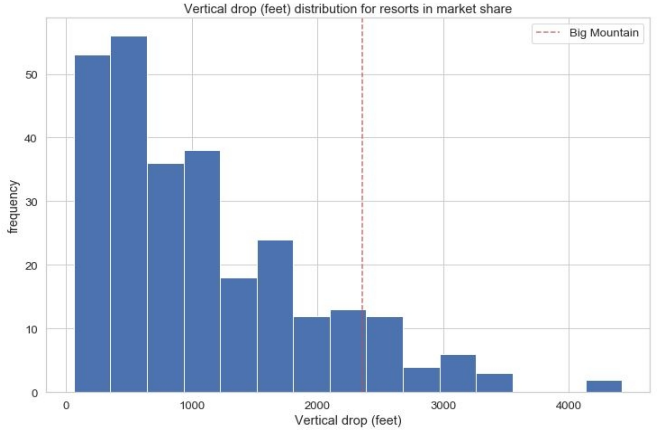
Resorts Feature Importance (cont.)

- Based on most important features, Big Mountain ranks at the top among resorts in the country



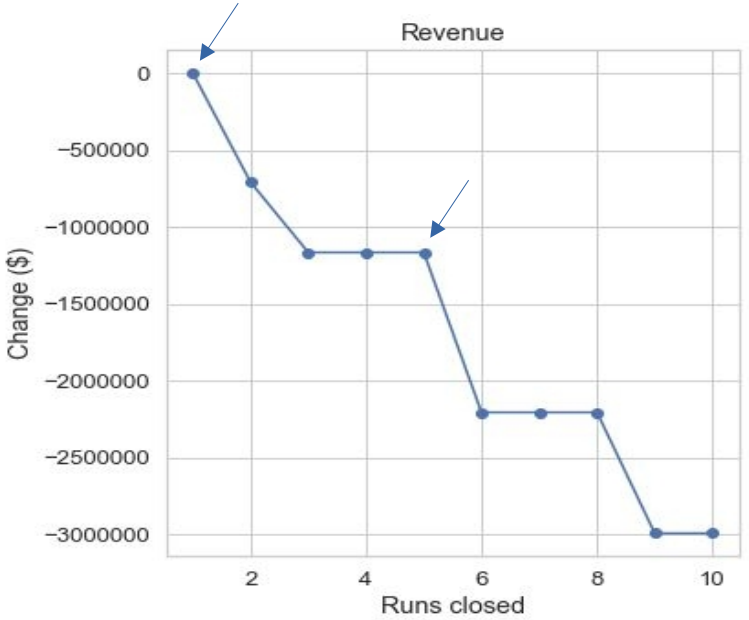






Model Results in Support of Cost-Cutting Strategies

- Results from model in which least utilized runs are closed show following changes in ticket price and revenue (revenue estimates are based on 350,000 visitors per year, skiing five days on average)
  - ✓ Closing the least used run does not require change in ticket price and, thus, does not affect revenue
  - ✓ Closing five of the least used runs provides the best trade-off in terms of cost-savings vs. decrease in revenue



Model Results in Support of Expansion Strategies

- **Expansion scenario supporting ticket price increase**
  - ✓ Adding a run to increase vertical drop by 150 ft and adding a chair lift
    → supports ticket price increase of $1.99
  - ✓ Estimated revenue increase of $3.5 mill. per year (based on 350,000 visitors per year skiing five days on average)

- **Expansion scenarios NOT supporting ticket price increase**
  - ✓ Same changes as above and adding two acres of snow making
    → adds cost
    → does not support ticket price increase
  - ✓ Increase longest run by 0.2 mi and add four acres of snow making to cover the run's extension
    → adds cost
    → does not support ticket price increase

IV. Summary and Next Steps

Summary and Further Work

- **Main Findings of Current Analysis and Modeling**
  - ✓ Model supports ticket price increase from $81 (current) to $94 (new)

    Further analysis and model tuning are required to determine the optimal price increase
  - ✓ Model supports closing the least used run without change of price

    This will reduce operational costs (amount TBD) without affecting revenue and can be implemented immediately
  - ✓ Model supports adding a run to increase vertical drop by 150 ft and a chair lift for ticket price increase by $1.99 → estimated revenue increase of $3.5 mill. per year (based on 350,000 visitors per year skiing five days on average)

    This scenario requires time and funding to be implemented and, thus, additional analyses are needed

- **Further Analyses and Model Tuning**
  - ✓ Discover & collect data to analyze statistics of in-state vs. out-of-state visitors
  - ✓ Based on above tune model with focus on resorts in the states of Washington, Oregon, Idaho, Wyoming in addition to resorts in Montana. If necessary, consider ski resorts near Calgary and Vancouver, Canada.
  - ✓ After model tuning, find optimal ticket pricing and best possible scenario for increasing company profit (consider/propose two best possible scenarios)