Big Mountain Resort Pricing Analysis

Guided Capstone Project Slide Deck

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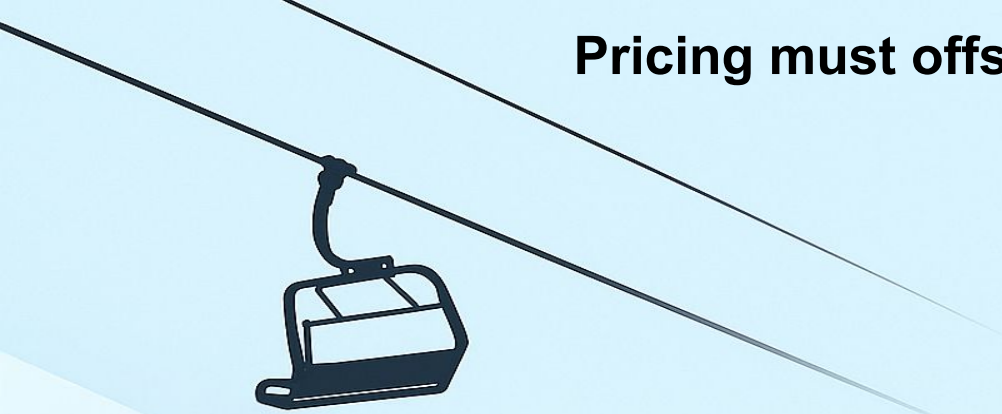
Pricing must offset +$1.54M without hurting demand



- New chairlift improves flow; adds **+$1.54M/season** in operating cost
- Competitive market; price must reflect value and positioning
- Decision horizon: **1–2 seasons**; focus on **adult weekend pricing**

- Set a price that **raises revenue without eroding demand**
- Respect **capacity** and guest-experience constraints
- Success = accurate predictions, scenario-tested revenue impact, clear guardrails

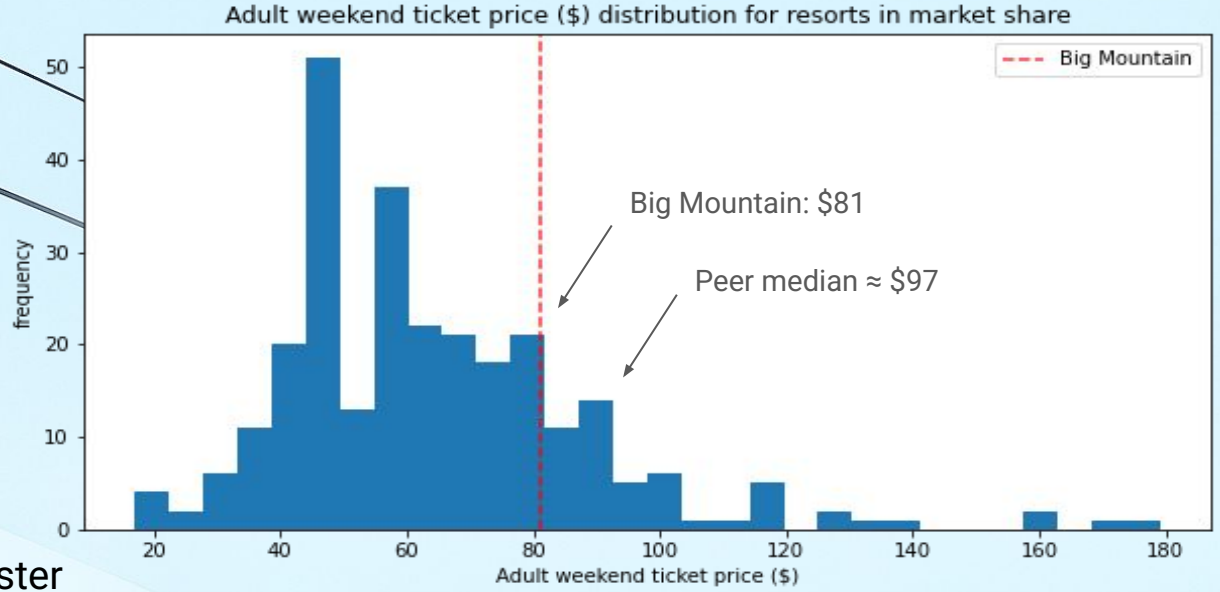
Set weekend base to ~$96 (+$15) with premium rules

- Set weekend base to **~$95.87**, keep weekday differential
- Apply **premiums** on **holidays/exceptional conditions** (utilization ≥ 85%)
- Projected to materially offset +$1.54M over **two seasons**
- **Re-estimate monthly** in peak; **pilot next cycle** with dashboard

- Big Mountain is **underpriced** vs peers
- Price driven by **terrain**, **vertical**, **snowmaking**, **chairs**

Recommendation & Key Findings

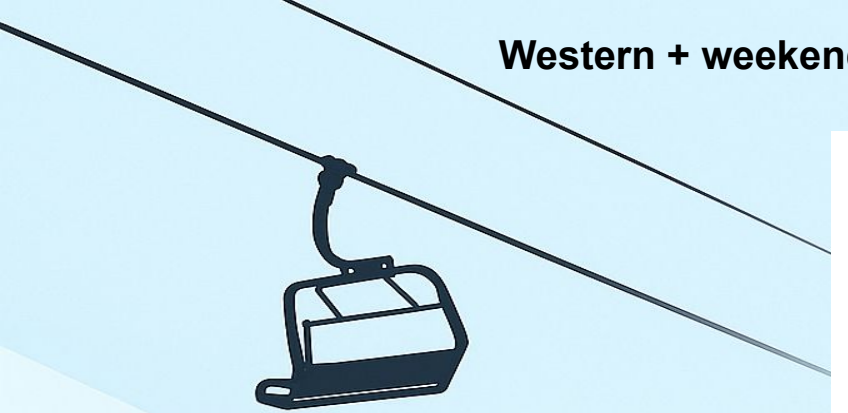
Big Mountain is underpriced vs peers

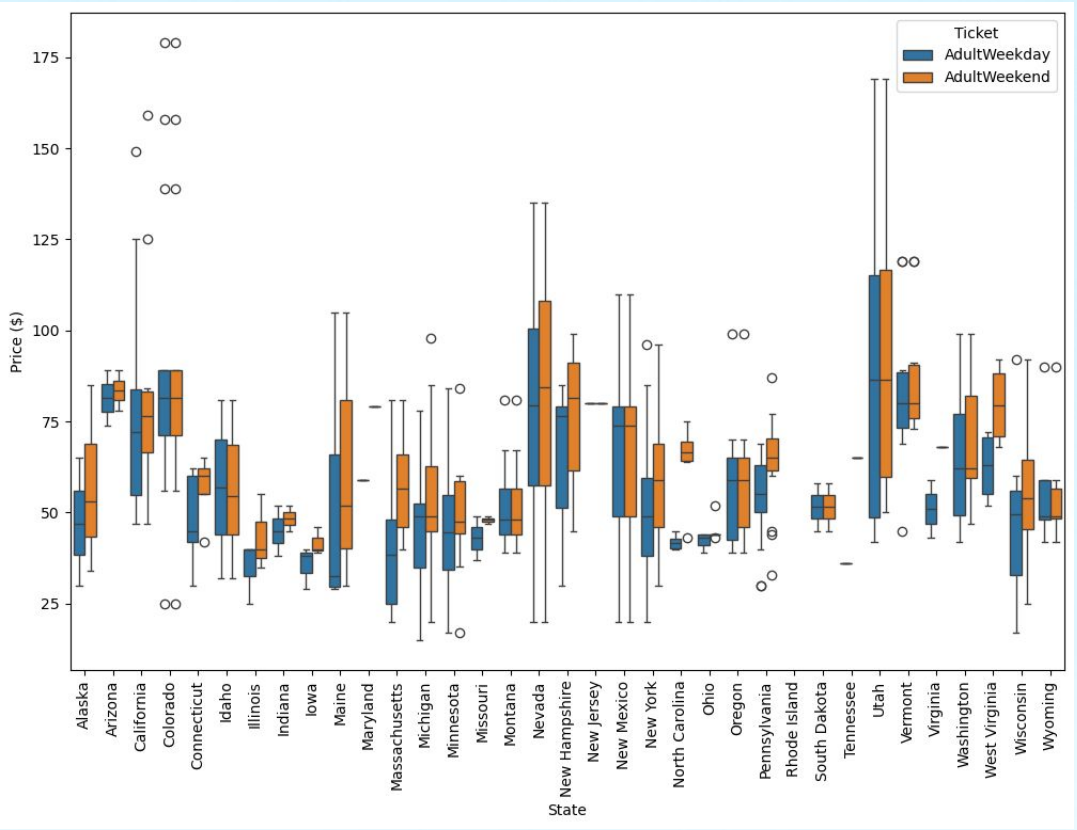


- Current **$81** sits **below** peer cluster
- **$95–$100** aligns with comparable resorts without overshooting (peer median at **$97**)
- Change maintains competitive rank while capturing value

Market Positioning (Price distribution w/ Big Mountain marked)

Western + weekends price higher; a higher weekend base matches norms

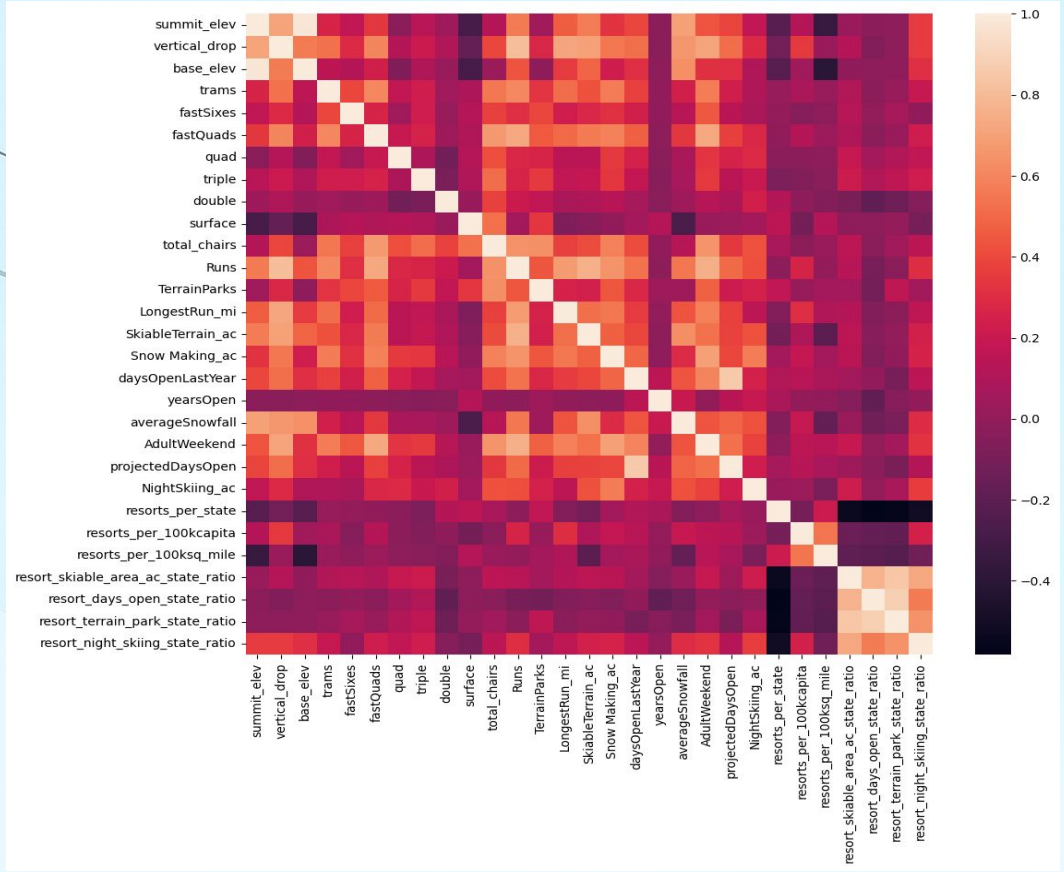




- **Western states** command **higher** prices
- **Weekends** price **above** weekdays across states
- A higher weekend base matches market norms

Regional / Weekend Context (State × Weekday/Weekend boxplot)

Drivers in data: scale, challenge, capacity

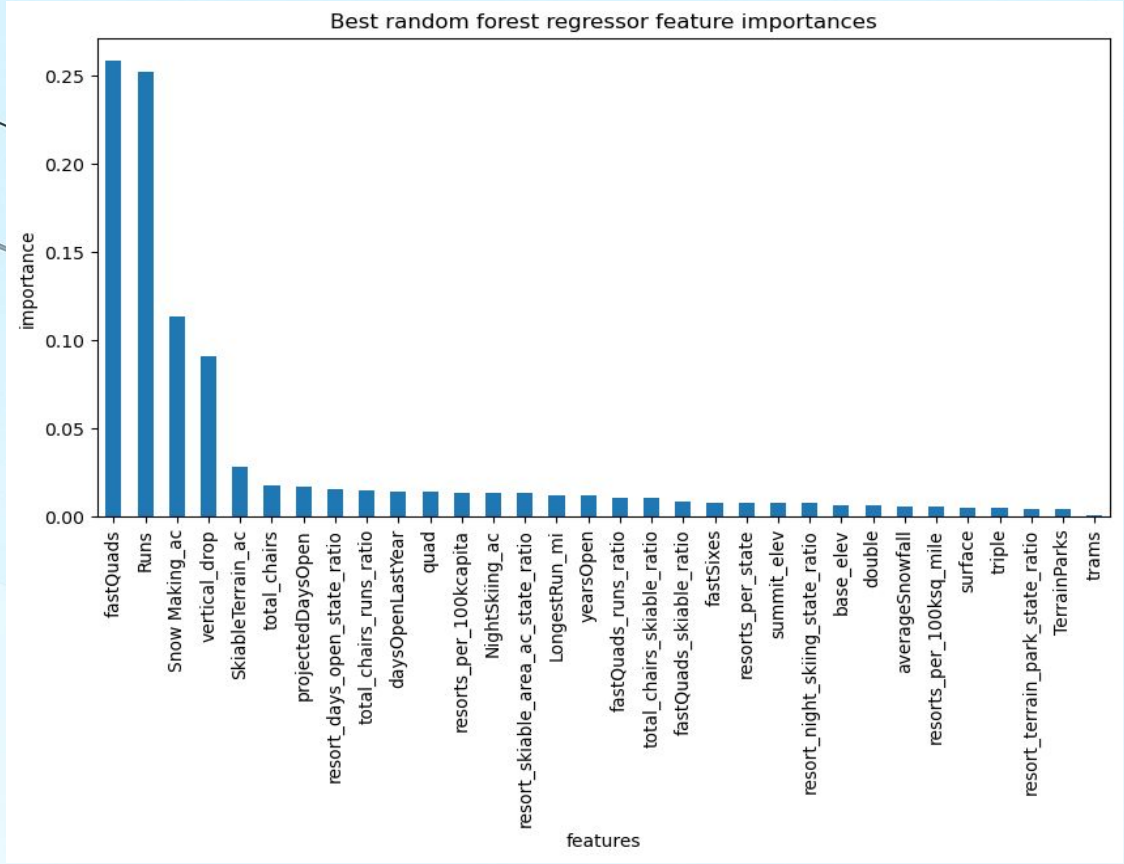


- Price rises with **skiable terrain**, **vertical drop**, **snowmaking**, **total chairs**
- Signals reflect **scale**, **challenge**, and **capacity**
- Supports premium vs. smaller/lower-capacity resorts

What Drives Price in the Data (Correlation heatmap)

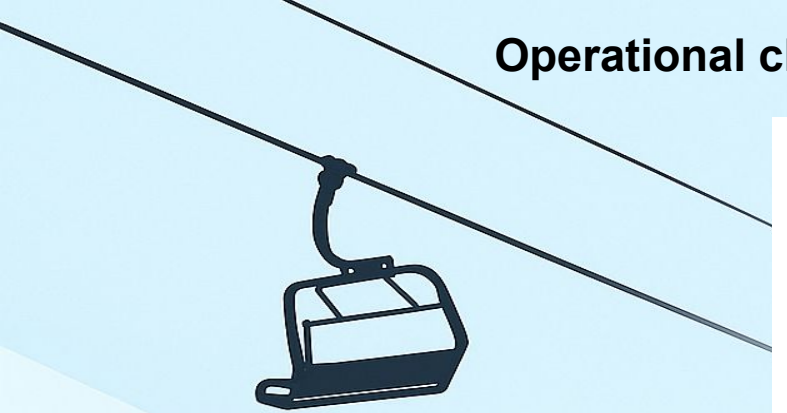
Drivers in model confirm the same story

- **Same four drivers** dominate in the winning model
- Hold-out performance: $R^2 \approx 0.89$, fit is decision-grade
- Stable, interpretable behavior suitable for policy setting

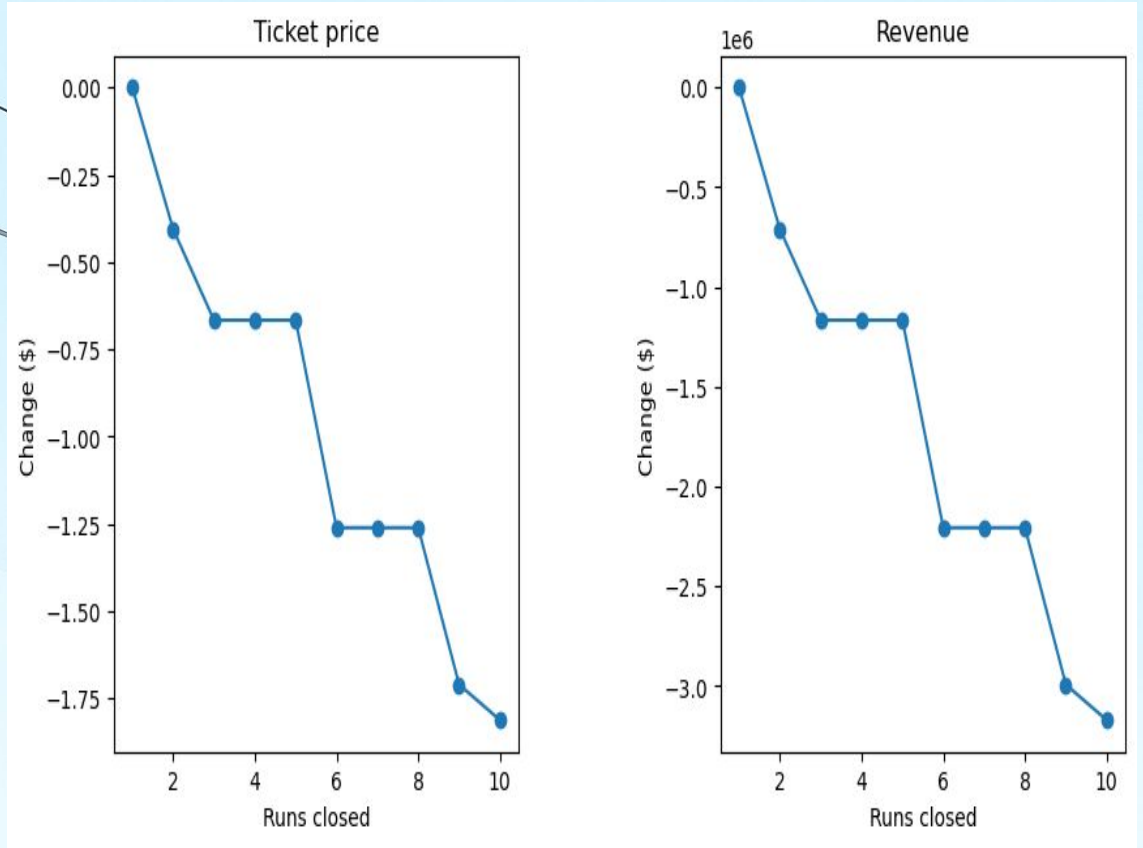


What Drives Price in the Model (RF feature importances)

Operational changes move optimal price and revenue predictably

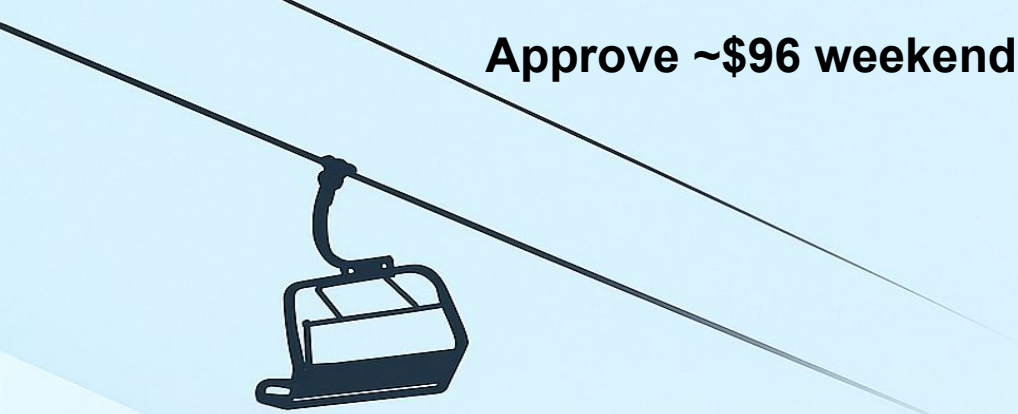


- Reduced runs **lower optimal price & revenue** in quantifiable steps
- Framework supports **day-of adjustments** under capacity constraints
- Guardrails prevent overpricing when conditions deteriorate
- Cap day-to-day change **±$5**



Scenario Sensitivity (modeling results & analysis)

Approve ~$96 weekend base + premium rules; pilot next cycle



- Adopt **~$95.87** weekend base + targeted premiums
- Expected to offset +$1.54M within **two seasons**
- Maintains competitive rank while capturing value

- **Monitor utilization**; **re-estimate monthly**; cap increases ±$5/day
- **A/B test** premium ladders; rollback on demand/NPS dips
- Ownership: Pricing lead with **Ops/Finance/Marketing**; review in **6–8 weeks**

Summary & Conclusion