Today, Big Mountain Resort is one of the top ski resorts in the country in terms of the skiing and snowboarding experience it provides to its 350,000 annual visitors. Of 330 resorts in the country, Big Mountain ranks amongst the best in delivering things that its visitors love to experience when they come to ski. As it turns out, at $82 Big Mountain also ranks among the highest in terms of ticket prices nationwide and even more so in the state of Montana. Even so, based on the value they provide to visitors relative the broader marketplace of resorts, it seems plausible that their current model could be underpriced. As they face an increase in operating costs of $1.5M this year from an investment in a new chair lift, a thorough analysis of what drives ticket prices and how Big Mountain can further optimize its pricing model and approach to future investments will be key.

In our analysis we were able to determine some key variables that influence how much someone is willing to pay for a ticket. These include: the number of fastQuads to transport people up the mountain, the number of runs, the coverage area for snow-making equipment, and the largest vertical drop. While we know that these are all key drivers of price, we also know that our dataset does not represent every important factor that may impact pricing. Additionally, there is an assumption that in combination these variables that determine the quality of a skiing or snowboarding experience can freely set prices, but it is possible that there are other market forces at work. That said, given what we do know we want to help Big Mountain make the most informed decision possible in order to manage the big increase in operating costs.

By modeling a few different scenarios we can infer what pricing is warranted in steady state as well as with potential future investments deployed. We’ve also determined a broader revenue impact to weigh against anticipated costs, which are largely outside the purview of our model since we have limited cost data. In our current state, we believe Big Mountain’s offering warrants a ticket price of up $91. This is a great finding! And this represents tremendous upside if Big Mountain can successfully capture it. Again, we know that Big Mountain is already on the high end in terms of pricing so some careful consideration of what makes sense in the range of $82 – 91 definitely seems warranted.

To elaborate on other future cases, in a scenario where Big Mountain adds a run (which we know is an important feature impacting how much visitors are willing to pay) of 150 ft and adds an additional chair lift, our model predicts an increase in ticket price support of $1.99 resulting in an annual revenue impact of +$3.4M. This is one of many scenarios, so it would be great to incorporate our model into the backend of a dashboard or web app that can be rolled out to business leaders. This would allow stakeholders to iterate through various scenarios that they may have in mind and also help drive new or deeper questions that inform Big Mountain’s growth trajectory.

In summary, Big Mountain is already a successful resort in many regards. By applying this model to inform their decision-making, they can adopt more targeted pricing to help them manage near-term costs (+$1.5M this year) and make better pricing and investment decisions going forward.