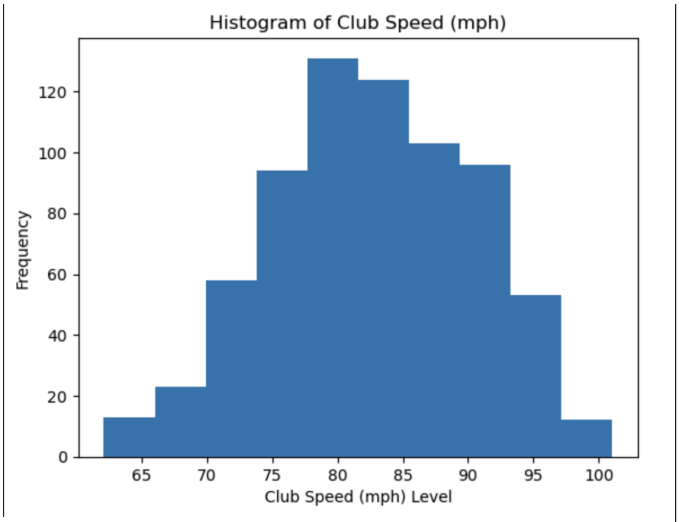
Will Waters

Memo:

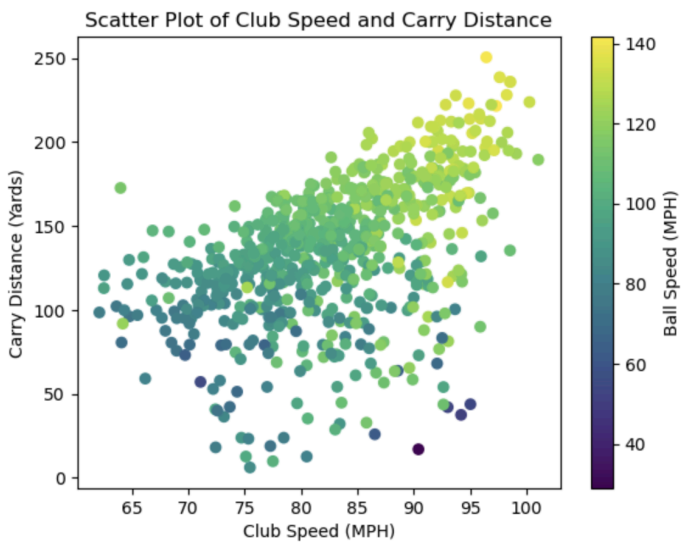
Golf Swing Data for single customer of Golf Improvement Company

We are a company that takes the swing data of consumers and tries to optimize their carry distance of their golf clubs to try and improve their golf game.

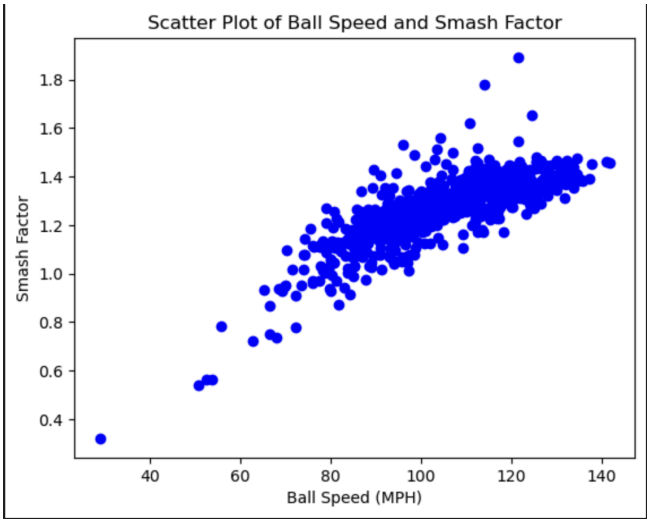
Consumer X:



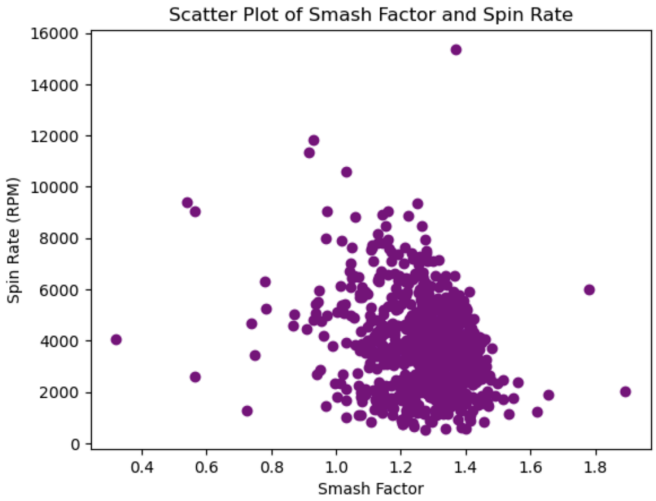
Visual 1:This histogram gives a baseline of how hard our customer Swings



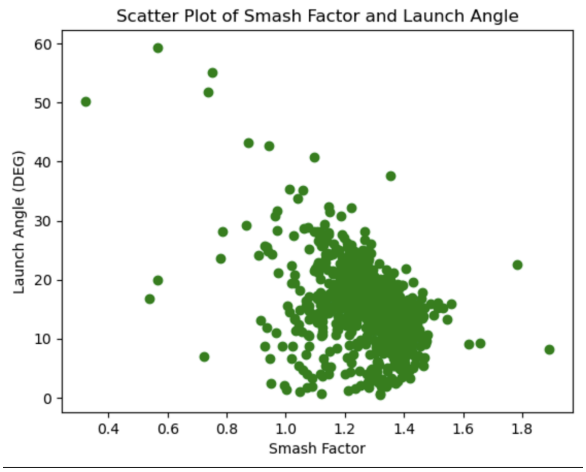
Visual 2: This scatterplot shows how far our customer is hitting the golf ball based on their club speed seen before, but it is heatmapped based on ball speed which is the important factor in distance.



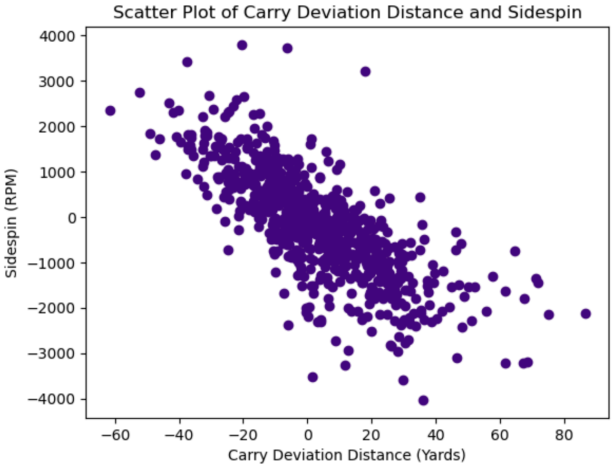
Visual 3: Given this image showing the correlation between ball speed smash factor, we know high smash factors make for farther hit golf balls.



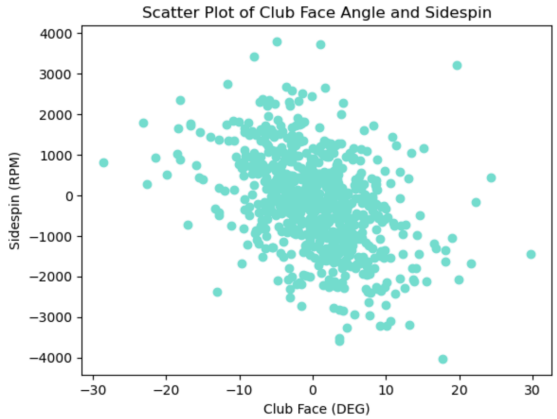
Visual 4: This scatter plot shows us how spin rate affects smash factor, meaning that lower spin rates lead to higher smash factors.



Visual 5: This scatter plot shows another factor that is important for smash factor which is launch angle.



Visual 6: This scatter plot showing the relationship between carry deviation distance (Distance from mean) and sidespin.



Visual 7: This visual shows the relationship between face angle and side spin (which was just determined as an important factor of carry distance (which we are trying to improve).

Ultimately, given the information at hand, the best advice that we can give to the client is that to best increase carry distance we need to increase the smash factor of the golf shots. One piece of information that would have been important in these findings would be knowing the specific equipment used for each shot because equipment can play a large factor in how the golf ball flies at any given time which is not given in the dataset. Based on what we do have though, we can conclude that the best way to increase smash factor to increase distance (correlation in visuals 2 and 3) would be to decrease spin rate and launch angle as these both saw increases in smash factor (visuals 4 and 5). Another piece of advice seen in visuals is to keep club face angle to as close to 0 as possible because this creates for the most true carry distances which are vital to increasing overall carry distance (visuals 6 and 7). Finally, the best way to increase carry distance is an increase in club speed. As seen in visual 1, the average club speed is around 80 which could be improved to increase carry distance. These are gradual changes that can be improved upon throughout your work on the golf course. We would like to thank our customer X for choosing to use our golf improvement system to better their golf game.