HOW TO IMPROVE

YOUR GAME WITH DATA

In-depth guide to Shot Scope data

Data provided by Shot Scope

Contents

Introduction

The purpose of this eBook is to highlight how you can use Shot Scope's performance tracking technology to analyze your game. With over 100+ performance statistics it may be overwhelming looking for a place to start – fear not, this eBook will be your go-to guide.

The eBook will cover everything from tee to green as well as features like Strokes Gained, Handicap Benchmarking, and Shots Plotted. Unlike other performance tracking suppliers, there is no additional cost to access these features.

Strokes Gained allows you to see where you are gaining or losing shots. Handicap benchmarking works in harmony with Strokes Gained to allow you to compare various aspects of your game against players of a similar level. These descriptions barely scratch the surface of these features, you could write a book on them, so we did. More information on both features can be found in **eBook Four - Traditional Statistics v. Strokes Gained.**

One thing that will become apparent throughout the eBook is the interconnectedness of the data, which makes sense because it reflects your golf game. So, let us look at how to analyze your data.

Data made simple

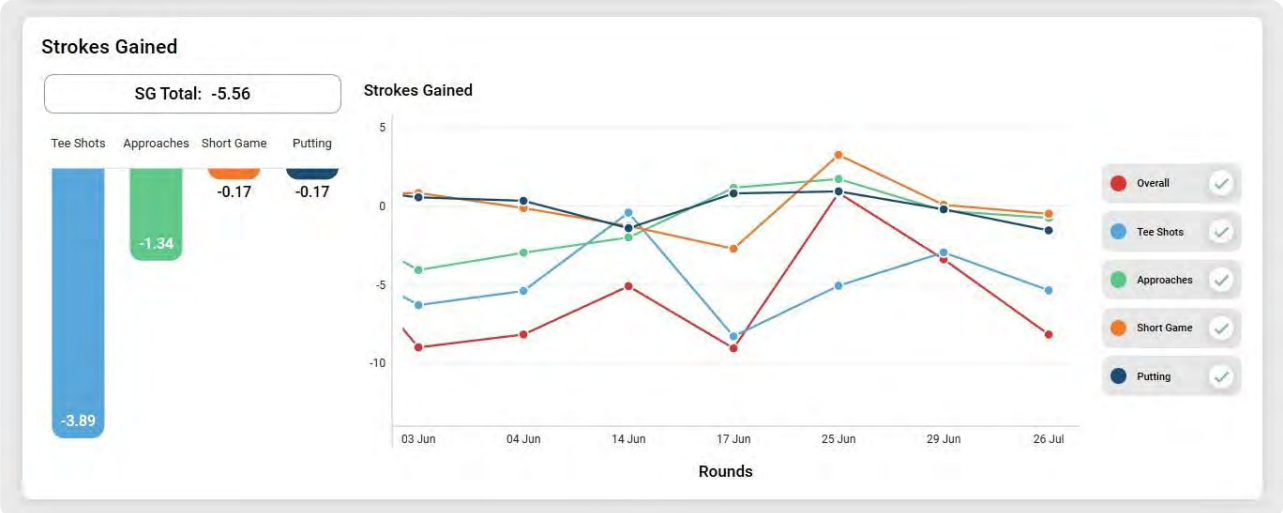
Three simple steps to analyze your data

Step 1. Review your overall scoring vs. Handicap Benchmark

To quickly analyze your data, go to the scoring section of the Shot Scope mobile app or dashboard within the Performance section. Here, the simplest way to identify an area that is costing you strokes can be found in the Strokes Gained section.

From the data presented below, we can easily identify that compared to the scratch golfer benchmark, the player is losing the vast majority of strokes from the tee.

Figure 1.
Strokes gained



We can see how this impacts Strokes Gained on the whole. For example, a better day off the tee on the 14th of June raised the overall in comparison to other rounds. However, we can see this golfer had a very good short game and putting performance on June 25th which managed to counteract the strokes lost off the tee - imagine how good this day could have been!

Step 2. Further Analyze your weaknesses

Now that we have identified that tee shots need to be improved, we can delve deeper into the data and see what exactly is the issue. Unfortunately, for the player in question there are a couple things we can identify.

Firstly, FIR% or Fairways In Regulation, is extremely low compared to the benchmark and a costly two way miss exists it would seem - this needs to be resolved!

Figure 2.
Fairway accuracy

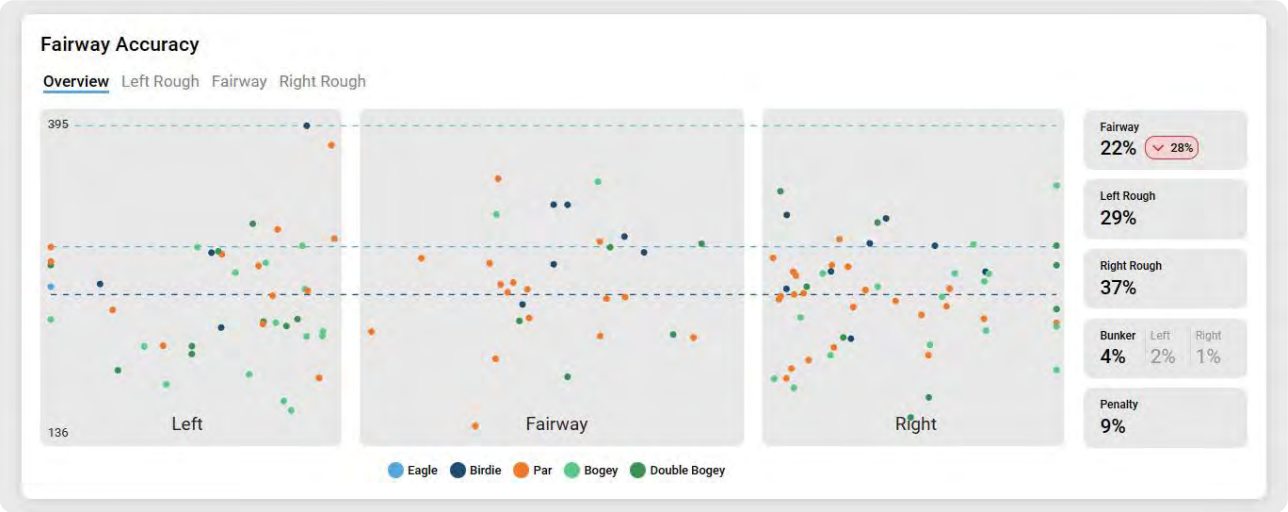
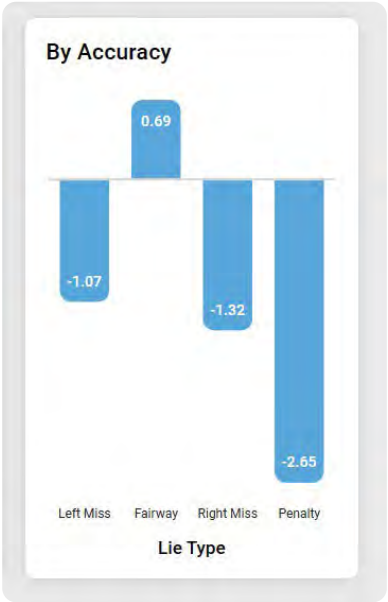


Figure 3.
Fairway breakdown



Secondly, the greatest issue off the tee is not the two way miss, although costly, it is in fact the penalty strokes.

Per round the player is losing over 2.5 strokes off the tee due to penalty strokes, very costly for a low handicap player!

Whilst the player is long off the tee, as we will discover in later sections, more control is needed if they wish to lower their scores.

Step 3. Implement a plan to improve

Now that we have clearly identified the area of the golfer's game that is costing them the most strokes, what should they do? There are a couple options, devise a plan independently to try and rectify the issue, although this can be counterproductive if you are compounding bad habits.

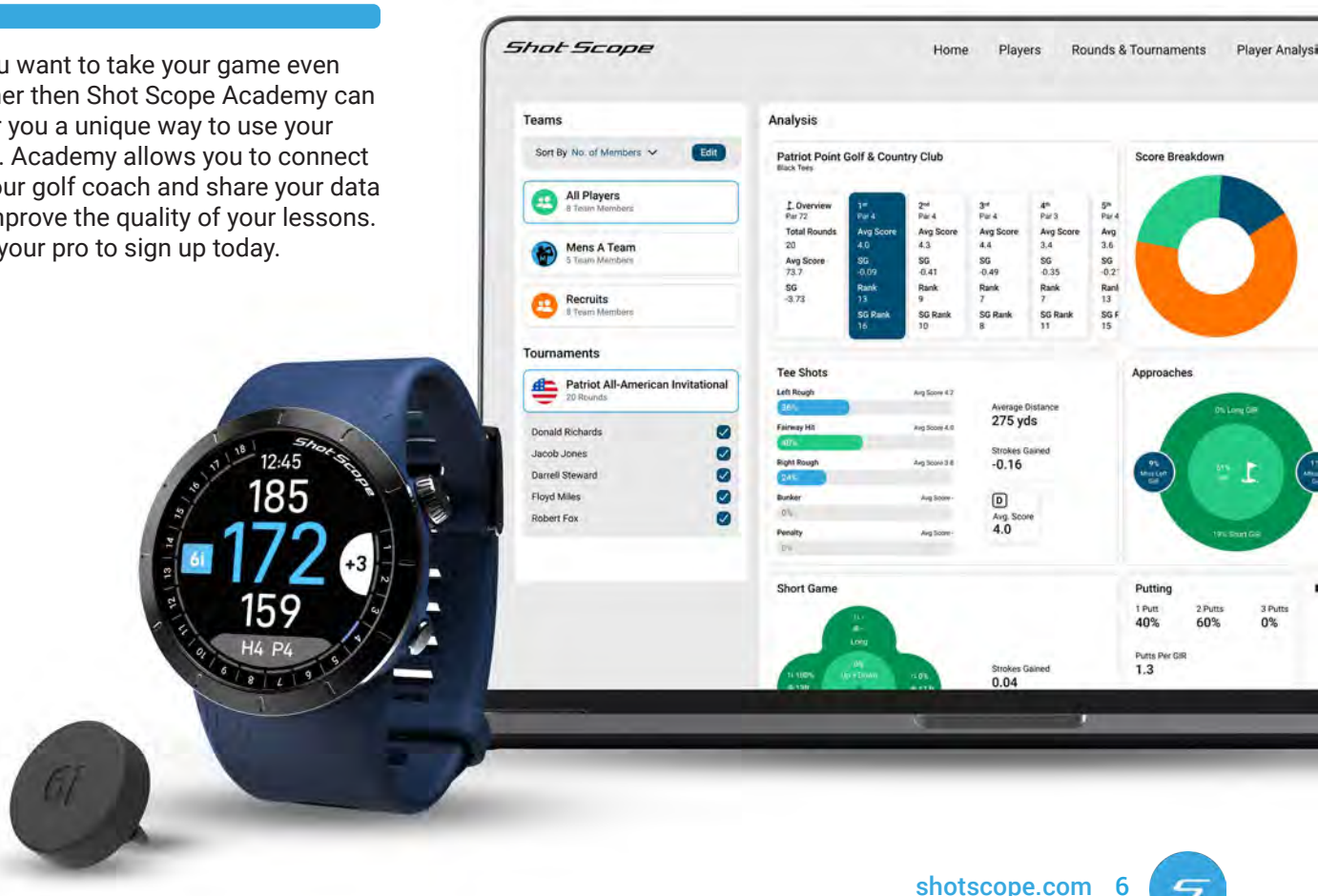
Alternatively, make use of the Shot Scope Academy platform and seek out the guidance of a Professional. Academy allows players and coaches to connect like never before by allowing coaches to analyze your performance data.

It is very difficult for a coach to identify a single area of your game that will improve your scores - with Academy, they can! With performance tracking data, coaches can identify the areas to improve and construct a plan to target these areas.

The best part, you can see how it impacts your scoring as you collect more data and progress through the plan.

Shot Scope Academy

If you want to take your game even further then Shot Scope Academy can offer you a unique way to use your data. Academy allows you to connect to your golf coach and share your data to improve the quality of your lessons. Ask your pro to sign up today.



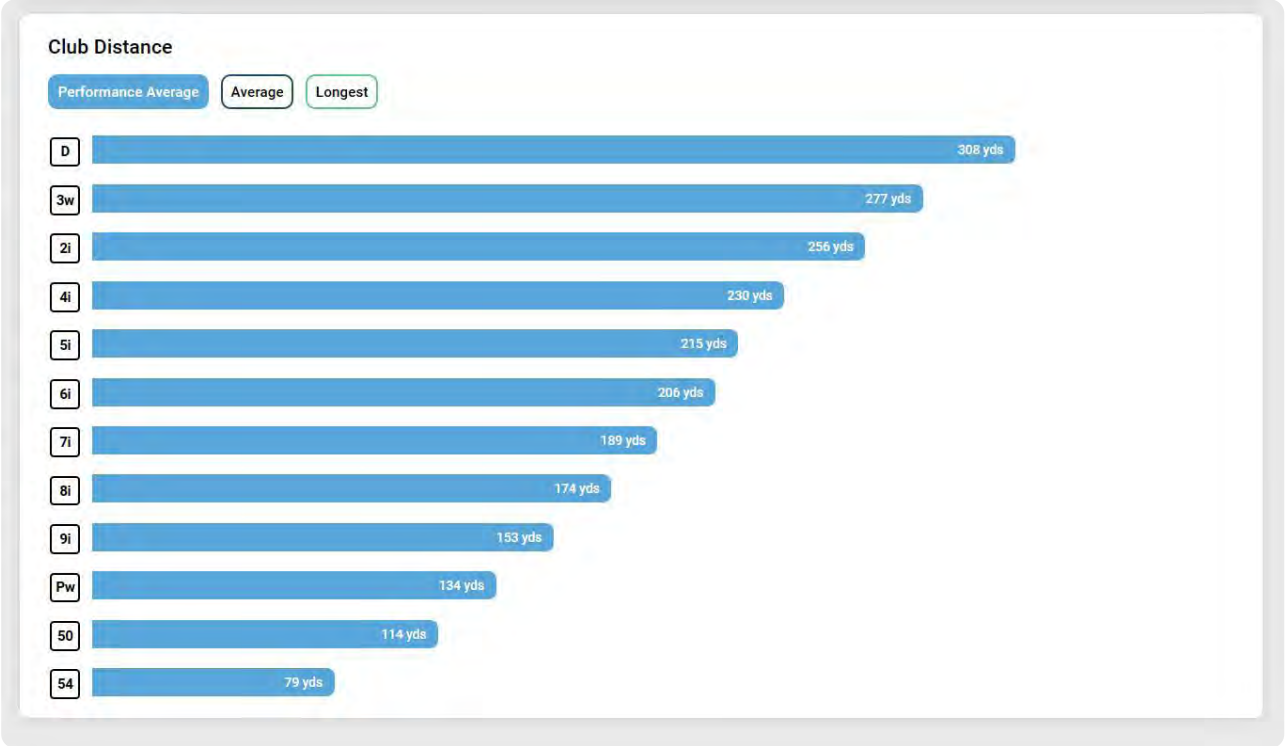
Performance Averages

Make the most of your length

Performance Average, or P-Avg., shows us how far we hit our clubs typically and removes major outliers from the data. Do not worry, your driver's P-Avg. will not be negatively affected by that one you topped ten yards!

This allows us to see how far we can expect to hit our clubs on a more regular basis. How often do you 'layup' on par 3s because you didn't take enough club?

Figure 4.
Club distances

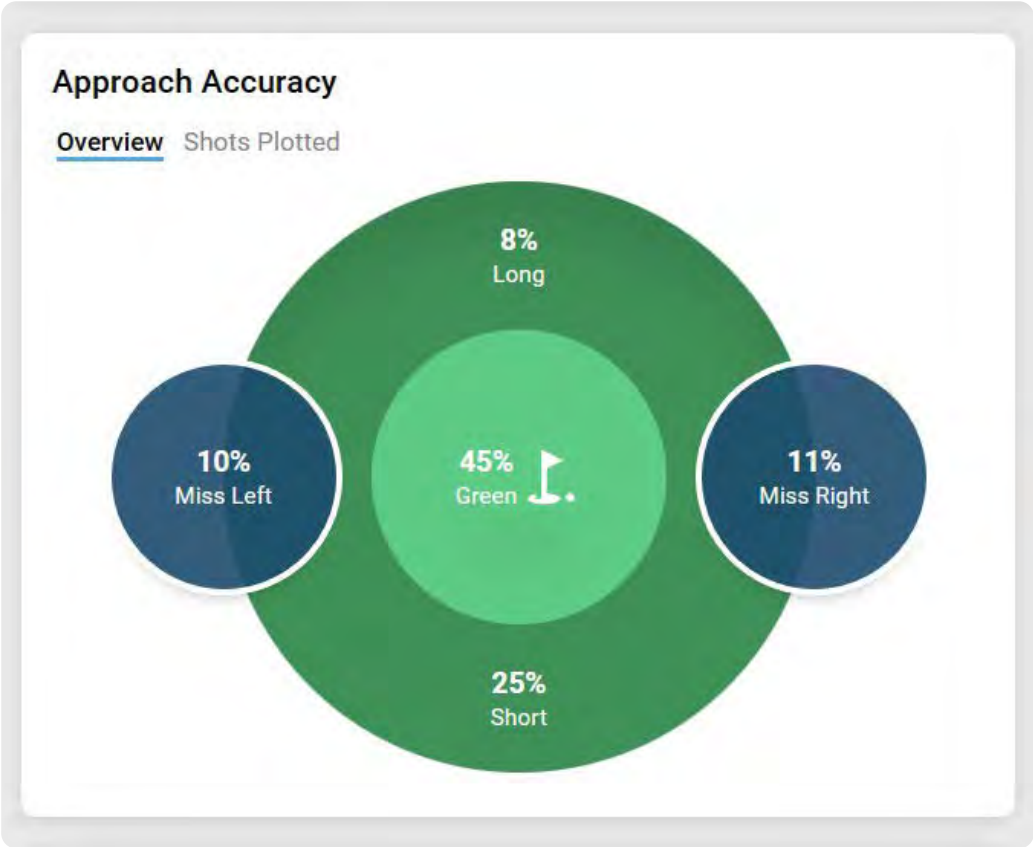


Performance Average distances allows us to see where we have gaps in our bag, one of the most important considerations in bag setup. Why? Because if we have a large gap in the bag, we are left with two options – hit the shorter club harder, or the longer club softer. Each of these options have their own pros and cons but it is an easily avoidable issue if we know our distances. We can then set up our bag appropriately, potentially choosing a hybrid as opposed to a wood.

Performance Averages is an important overarching metric, which, when used in accordance with other statistics, is very insightful. Briefly, you can use it with Strokes Gained for tee shots and FIR% as well as GIR% when playing into greens.

What clubs are you using on the course and are they putting you in scoring positions? For example, how often do you leave your approach short? This is the most common miss amongst amateurs, playing for the 1/10 perfect shot rather than P-Avg.

Figure 5.
Approach accuracy



Tee shots

Start the hole off right!

Overview

They say that you score from 100yds and in, but you have to get there first!

As you would expect, the Fairway in Regulation percentage, or FIR%, is where we see how accurate you are from the tee box. Now we would prefer to hit fairways as this then leads to more control for our second shot, but the most important thing is to try and avoid the fatal two-way miss.

If we know what our 'miss' is, then we can allow for this. Performance tracking data allows us to see what our tendency is and plan accordingly. You may be surprised at how similar tee shot accuracy is across the handicap ranges. It is only when we move down the bag, we start to see accuracy differences with certain clubs. However, all the handicaps have a common miss – right. The most common miss off the tee is right, and so by simply aiming further left, you may save strokes without needing a lesson!

Figure 6.

Driving accuracy by handicap

Handicap	FIR %	Miss right %
0	50%	25%
5	51%	27%
10	50%	27%
15	48%	28%
20	50%	29%
25	50%	30%

We can also see our Distance average in yards as well as Fairway Success by Club and Score to Par. Are you really that wild off the tee with a driver? Compare it to your other clubs easily here. You may find that you are not as wayward as you think.

As we will discover in the Strokes Gained section, sometimes the risk of missing a fairway is worth taking because of the benefits of being closer to the green.

Looking at Score to Par based on lie type, it is possible to see where wayward tee shots are going and how they are impacting scoring.

Strokes gained

Strokes Gained is the first place to look when interpreting any of your data. Every shot is given a positive or negative value based on accuracy, length off the tee, and distance left to the green. Being longer off the tee, even if you hit slightly less fairways, is typically more beneficial than hitting fairways and being twice as far away. This is because of the distance to the green for the second shot.

Figure 7.
Strokes gained tee shots

Figure 8.
Driver vs 3 Wood

	Driver		3 Wood	
Handicap	FIR %	P-Avg. Distance	FIR %	P-Avg. Distance
0	46%	285yds	50%	262yds
5	49%	258yds	51%	244yds
10	50%	260yds	54%	234yds
15	48%	238yds	47%	224yds
20	46%	225yds	48%	215yds
25	50%	204yds	59%	201yds

In one of our recent blogs, we look at driver vs. 3 wood off the tee. Playing 3 wood off the tee does not necessarily mean you are playing 'safe' – just shorter. Shots Plotted allows you to see how you are navigating the course from an objective point of view.

Objective in the sense that it simply shows the club you hit, where it finished, and what that meant for your scoring in terms of Strokes Gained. With this information, you can devise a strategy off the tee.

Click here to read Driver vs 3 Wood

Approaches

Why you're missing greens

Overview

The approaches section contains any shot attempting to hit a green from beyond 50yds.

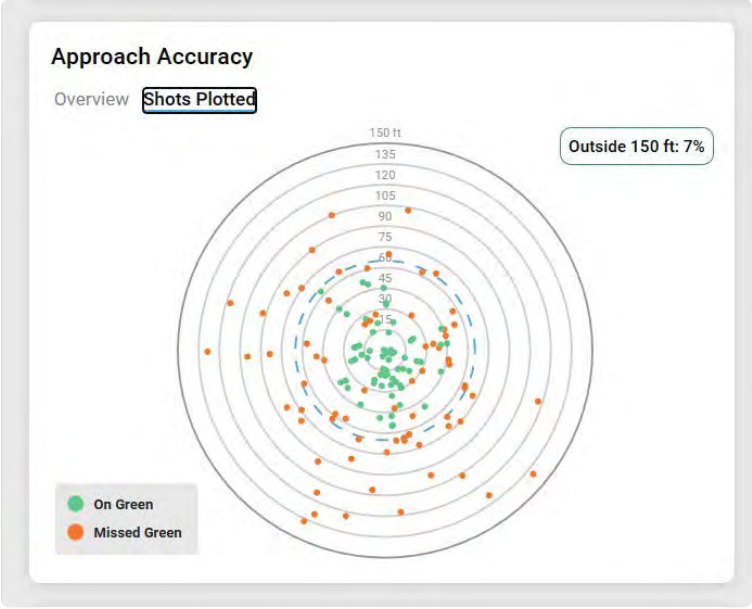
Looking at approaches, our immediate attention is brought to accuracy. Often, most amateurs will miss the green short which is easily fixed by clubbing up and committing to the shot. To try and combat this, golfers could play to the back of the green yardage, this may help them hit more greens, easier said than done, but it really is that simple.

Rather than play for our 'Sunday best,' we must consider the 80% that we do not quite catch and allow for this. Whilst we are not planning to mishit shots, we must manage our expectations and aim to simply hit the green.

Shot Scope data suggests that scratch golfers get up-and-down approximately 50% of the time. Therefore, players should aim to simply hit the green and if they miss, putting is typically the best option. Even if you are not the best putter, a bad putt is likely to be closer to the hole than a bad chip.

Figure 9.

Approach accuracy



Did you know?
That of all missed greens by amateur golfers, 80% are missed short!

Moving on to proximity, it is possible to break this down by club, lie/distance, and by time. Each has their own insight but if you are looking for an overview then 'breakdown' contains your average proximity to the hole.

We can adjust the distance we are measuring against with the slider at the top of the page and see our proximity to the hole from various distances. Obviously the closer the better, but an interesting comparison can be found when we look at 'By Lie/Distance.'

Within the 150-200yds category the player in question is closer from the fairway than they are from the tee. This would suggest that there is an issue on Par 3 tee boxes, aiming for the middle of the green might help. Insights like this is made possible with performance tracking.

Figure 10.
Proximity by Distance/lie

Figure 11.
Green success by club

Green success by club gives a breakdown of how often you hit the green when playing that club, we would hope to see a gradual improvement as we move down the bag. Not always the case, but this can give insight into areas to improve. It makes sense that we would hope to hit more greens with a 9iron compared to a 7iron.

When looking at stats that focus on individual clubs, check the number of shots recorded for each club. If a club has very few shots recorded, the data may be skewed somewhat.

Figure 12.
Shots to finish by club

Moving onto 'Shots to Finish.' This shows us the number of shots that we play after hitting each club when approaching a green – the lower the number, the better. As with all stats concerning club selection, we would like to see a gradual decrease in the number of shots required. That is because we would hope to see proximity decrease and as a result the number of putts etc. decreasing. If we are longer off the tee, we can then hit a shorter club into the green, which would hopefully result in more greens being hit, and so our scoring should improve. That is the aim!

Strokes gained

We can also look at Strokes Gained for our approaches which breaks down our performance into distances as well as by lie type.

Looking at the 'by distance' statistics we can see with the data provided that shots are being lost from closer to the green than from further away – cause for concern. From 50-100y the player averages 44% success compared to 59% from 100-150yds (all lie types). Diving into this further you can see that they hit more greens from the rough (58%) from 50-100yds as expected, but it is from the fairway that needs improving - averaging only 42%.

Figure 13.
Green success

The average proximity to the hole for amateurs is **46 yards** making going for the pin risky, try to play to the middle of the green in order to hit more greens.

We would hope to see more success in general but especially from closer, hitting more greens from further away indicates a wedge issue. Performance tracking allows us to identify these trends and tailor practice sessions to combat these issues – more finesse required.

Within 'By Lie/Distance,' we can see that from the rough shots are being lost, because of the impact on control from heavier lies. Worryingly, the greatest number of shots are being lost from the tee.

As mentioned previously, working on the setup and strategy from Par 3 tee boxes seems to be a key area to target for lowering scores. This is not to say that approaches from the fairway do not need to be improved, but rather that if we are looking at obvious areas to work on, Par 3 strategy is one.

Short game

Get good around the green

Overview

The short game data focuses on shots within 50yds of the green.

Immediately we are met with one of the most important statistics, up-and-down percentage. Whilst we are trying to hit as many greens as possible, inevitably, some will be missed. Therefore, we must rely on our ability to get up-and-down to prevent dropping shots. We can see by club, by distance, and over time how successful we are around the greens.

Figure 14.
Up and down

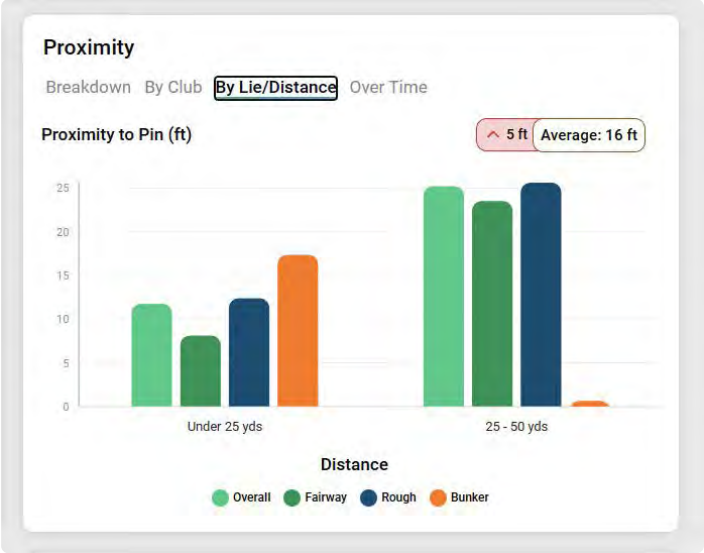
For the player in question, the 58-degree, LW, should be left in the bag unless absolutely necessary based on the data. With the LW in hand, the golfer gets up and down roughly 1 in 4 times, we would hope to see this a lot higher – short game practice required. However, as most amateurs will find, the putter is clearly the most successful around the green, the 'Texas Wedge' may need to be implemented more often.

Figure 15.
Up and down

This is complemented nicely when we look at proximity 'By Club,' where we can see the putter is leaving the ball nearest the pin. So, if we are not getting up and down, at least we have the best chance by being closer to the hole.

We can also see when we look at ‘By Lie/Distance’ proximity to the pin on average is 5ft higher than the handicap benchmark and so the player could look to work on this.

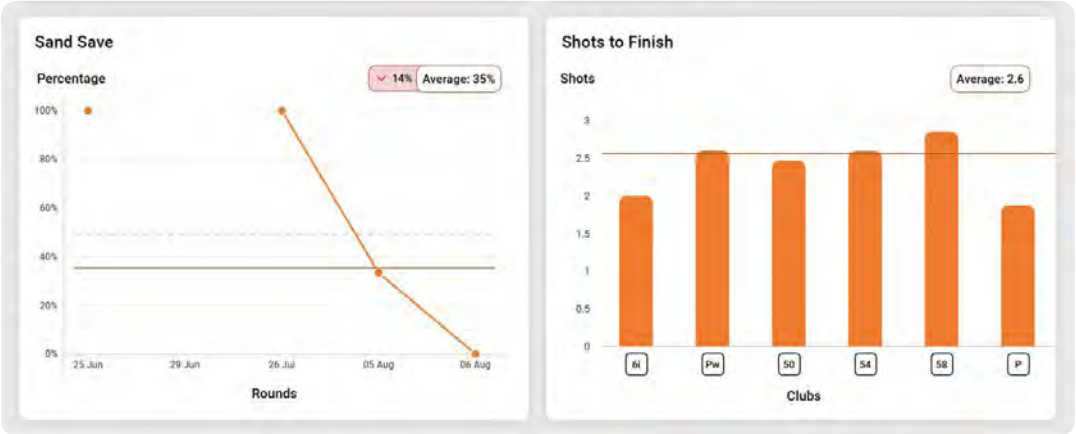
Figure 16.
Proximity by Distance/lie



The handicap benchmarking feature allows you to compare your game against players of a similar level and easily identify areas to improve that would lower your scores.

We can also see our ‘Sand Saves’ and ‘Shots to Finish’ on this screen as well. Data on sand saves may have gaps simply because you have not been in a bunker. If you find yourself relying on sand saves most rounds, there is an issue with another part of your game, consider aiming for the middle of the green.

Figure 17.
Short game statistics



Like with approaches, we can see our Shots to Finish and want this number as low as possible, potentially looking to include some more shots with the ‘flat stick.’ It may not be as exciting as attacking pins with lofted wedges, but it will almost certainly benefit your scoring.

Strokes gained

Here we can see strokes gained over time as well as ‘By Distance’ and ‘By Lie.’

Looking at distance, strokes are being lost from within 50yds. We can see a small amount are lost from under 25yds and 3x as many from 25-50yds. Therefore, both areas can be improved to get closer to the handicap benchmark, in particular from 25-50yds.

Figure 18.

Strokes gained by distance and lie

At this distance, shots require greater distance control and ‘feel’. This feeds nicely into the lie section where a concerning statistic can be seen.

The player is better from the rough than they are from the fairway. Perhaps, this is a mindset issue. In the rough, the goal may be to simply find the green whereas from the fairway they may be trying to attack the flag. The player may benefit from playing less high tariff shots, or aiming at targets that are not necessarily the pin but rather more central to avoid missing greens.

Similarly, playing from fluffier lies can give a slightly bigger margin for error as a heavy shot can still result in a good strike compared to a tight fairway lie. Hitting the ball heavy from the fairway will often result in a large drop off in distance and so the poor strike is punished to a greater extent.

Unsurprisingly, as the player has not played many bunker shots in the data, their ability to execute one when required has been impacted. Even if you are not in them often, it is still wise to practice them to avoid costly mistakes should you find yourself in one.

Putting

Learn to putt for dough

Overview

The area of the game that can make or break scoring, putting. We all know someone who is incredibly good at putting, and someone who is incredibly bad. It is sometimes referred to as a game within the game, if you can master it, good scores will follow.

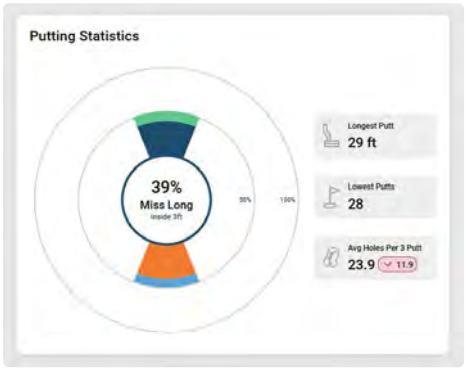
Utilising handicap benchmarking, we can see how many putts we should be looking to make when playing, lower than you might have expected with 25hcp taking approximately 33.3 putts

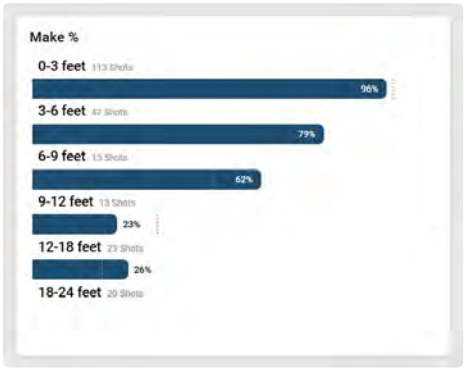
Looking at putting statistics, the most common miss amongst amateurs is short and distance control is something all players could work on. Getting the ball to the hole is the main priority, and then within 3ft is the next.

Figure 19.
Handicap vs avg. putts per round

Handicap	0	5	10	15	20	25
Avg. putts per round	29.3	30	31	31.8	32.2	33.3

Figure 20.
Putting stats

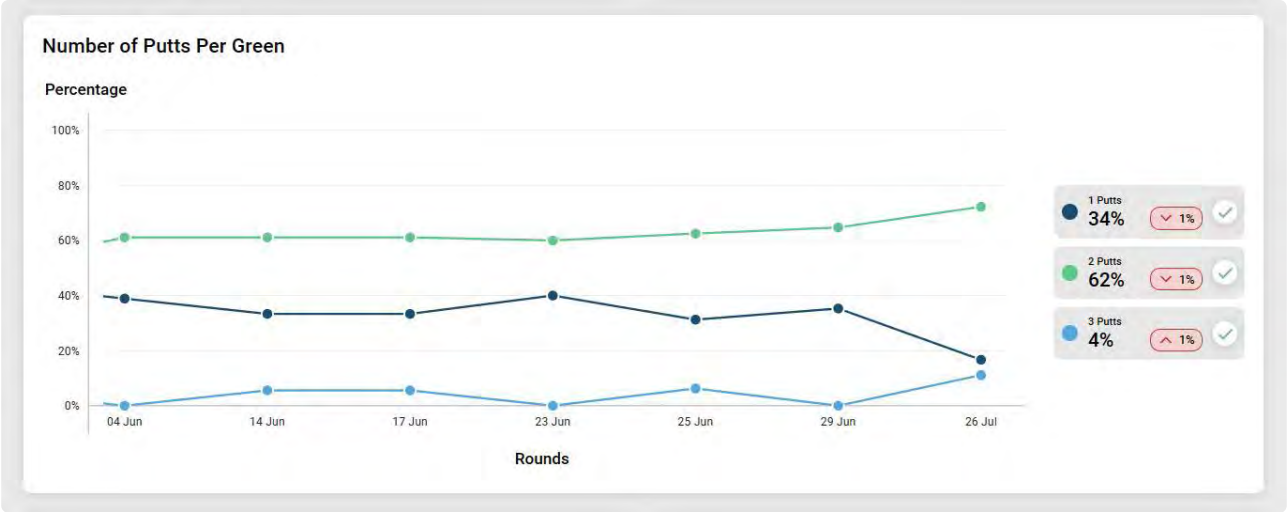




Looking at make percentage, we want to get our long-distance putts within 3ft because we should be making upwards of 93% of these for all handicaps. Similarly, we can see our likelihood of making a putt based on distance in 3ft increments and compare this to players of a similar handicap.

This will highlight if there is a distance that you are struggling from, for example, 9-12ft. Whilst the 0-3ft is high, it can be improved to prevent losing easy shots from close range. It is easy to drop shots with simple mistakes like missed 'tap-ins' so take your time over every shot.

Figure 21.
Putts per green



Number of Putts per Green shows the likelihood of single putting, two-putting, or worse when on the green. In an ideal world we would single putt every green but unfortunately that is not the case. Therefore, we should aim to have our two-putts above 60% and three putts as close to zero as possible.

Interestingly, when looking at the handicap ranges, the main changes are the number of three-putts vs. single-putts from a scratch player to a 25hcp, two-putts are almost the exact same.

Figure 22.
Putts per green by handicap

Handicap	Single putt	Two putt	Three putt
0	37%	60%	3%
25	25%	61%	14%

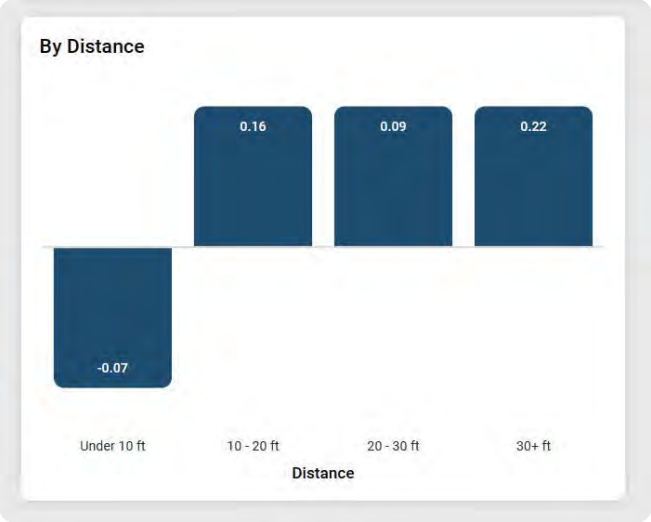
Distance of Putts Made is the cumulative distance in feet of the putts you have holed. The higher the number, the better as this means you are making lengthier putts. We can link this to our First Putt Distance. If it is very high, then it is likely our distance of putts made will be low as we are more likely to be tapping in a lag putt than holing a 30ft putt.

It also suggests how well we are playing from a short game/approach perspective as it reflects our proximity to the hole as well. By now you will be understanding how the stats work together to reflect and reinforce aspects of your game, both strengths and weaknesses.

Strokes gained

Within strokes gained for putting, we can see how well we perform on the greens from round to round and from various distances as well as the impact this has on our overall strokes gained.

Figure 23.
Strokes gained putting



When we breakdown our strokes gained by distance we can see at what distances we are gaining or losing strokes on the green. The player in question, compared to a scratch golfer, loses out from within 10ft but makes marginal gains at every other distance increment.

With this information, we can target our putting practice to target whichever distance needs to be improved on.

Scoring

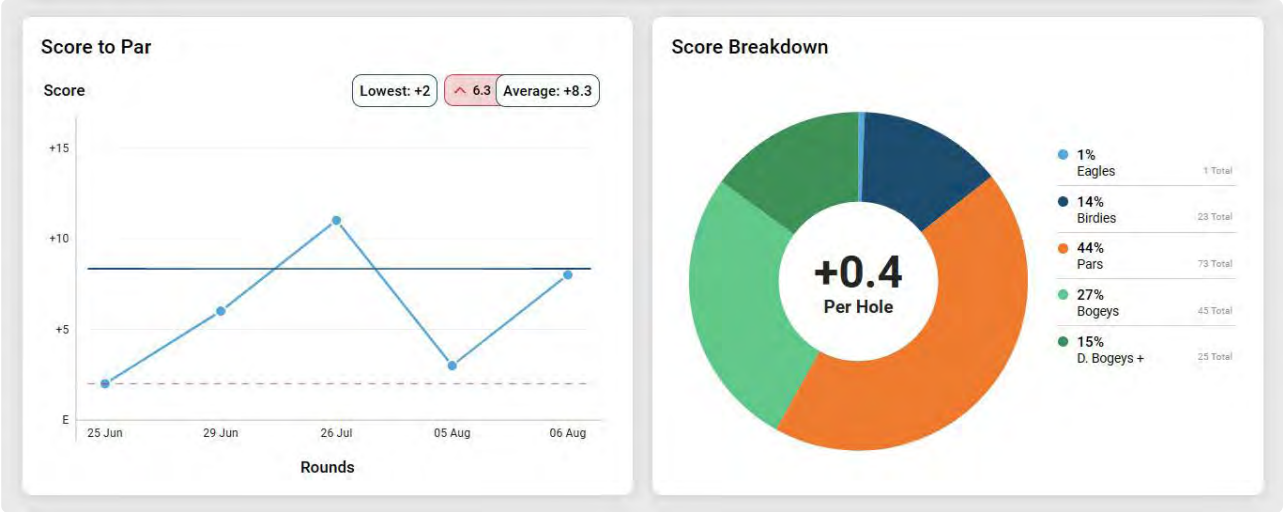
See where you are losing shots

Overview

Scoring gives a holistic view of your scoring average

Here we can see your average Score to Par, giving you an idea of how your score compares to golfers of a similar level. Delving deeper, we can look at the Score Breakdown of your recorded rounds, tracking everything from eagle to double bogey and worse. We would look to minimise double bogeys and worse as these are the hardest scores to recover from, if players can keep their worst holes to bogey, they would benefit greatly.

Figure 24.
Scoring overview



We can also differentiate between Front 9 and Back 9 scoring, this could suggest we need to look at our pre-round routine if we score poorly on the Front 9. Likewise, if Back 9 scoring is poor then perhaps, we need to consider how we manage our game as we progress through the round to prevent performance drop-off. Lastly, Scoring contains Par Breakdown which highlights scoring averages on Par 3/4/5 to see if golfers are gaining or losing strokes on certain pars. For the player in question, Par 4's are costing the most shots. This must be addressed as they are the most common par structure for many courses.

Strokes gained

This contains an overview of the different subsections mentioned previously within the eBook. Here we can see how certain aspects of the game can be damaging to overall scoring. For example, the 17th of June saw a large drop off in Strokes Gained, perhaps this is because of the drop off in tee shots.

Figure 25.
Strokes gained breakdown

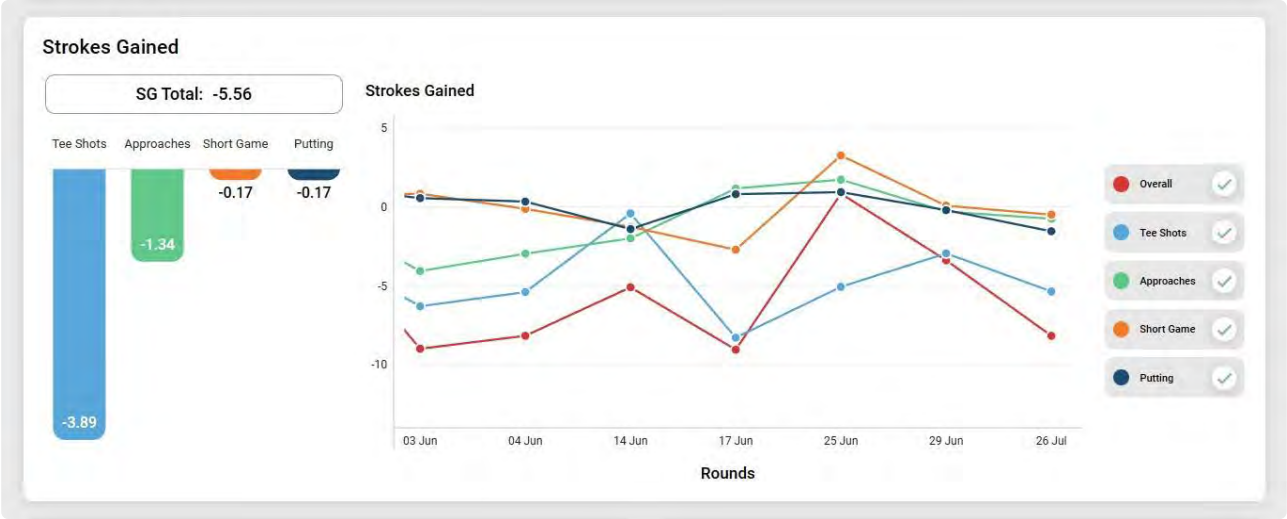
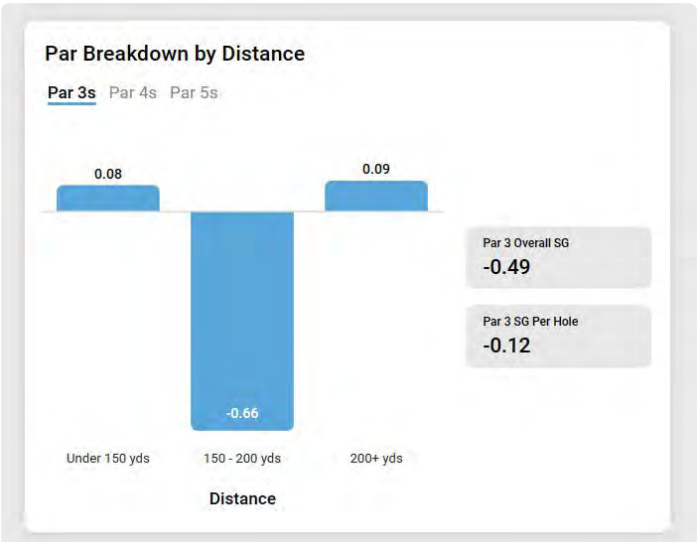


Figure 26.
Par breakdown by distance



As with the overview page we can also differentiate Front 9 and Back 9 scoring should we want to split the two.

Par Breakdown by Distance contains valuable information on scoring to par depending on the length of the hole. We can see, as the data from Approaches suggests, Par 3's between 150 and 200yds are an area that the player struggles with. As the holes grow in length, the player can utilise their length and as a result their Strokes Gained improves – **it is all connected!**

Aerial maps

Plan your next round

Overview

Aerial maps allows golfers to preview courses before they play. Why is this useful? Well, is there anything worse than going to a course for an away match, open, or bounce game and having no idea where you are going or what club to hit? The age old adage, 'I'd score better if I played the course again'.

GPS to hazards, layups, and doglegs

Give yourself the best chance at scoring by using aerial maps to measure distances to doglegs, layups, and hazards which will allow you to devise a plan without setting foot on the course. Take the guesswork out of your game and focus on executing your plan!

Never be unsure again

Blind shots are a thing of the past as the birds eye aerial view will allow you to see all the danger ahead and pick your target.

Practise with purpose

Make the most of your time

Based on the data presented throughout the eBook, we would suggest that the player works on the following:

Par 3 plan

The player manages to find the green more from the fairway and rough than they do from a tee. This should not happen considering you can tee the ball perfectly and position yourself on the tee box to suit. Instead of aiming at the flag, play to a yardage and position at the centre of the green, greens in regulation will lead to more pars, if not birdie chances.

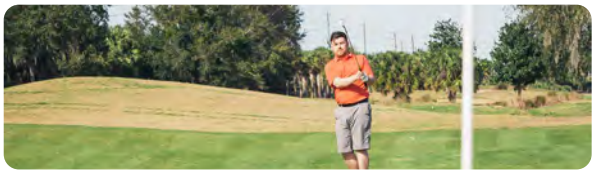
Approach accuracy

Overall accuracy is better from 100-150yds compared to 50-100yds in terms of Green Success. Like the 'Par 3 Plan', the player look to hit greens rather than aim at the flag. Even this slight aim adjustment can help to lower scores by increasing GIR% and trusting the putter.

Texas wedge

Dedicate some time to the short game area when practicing. Players of a similar level are on average 4ft closer to the pin than the golfer in question. When we look at make percentage, 4ft equates to a significant increase in the likelihood of holing the putt.

Some practice should be spent from various lies including bunkers to prevent any easily avoidable mistakes on the course. Better to be prepared and not go in a bunker than unprepared and need to make a sand save



Short game success

Use the putter more to avoid any short-game sorrows. Based on the proximity to the hole as well as the up-and-down percentage, the player should look to use the putter where possible. There is far less chance of mishitting the putter - a bad putt is likely to be better than a bad chip. Using wedges like the 58 degree fails to get up-and-down 90% of the time and so it requires more practice before being used on course.

Conclusion

How to improve your game with data

Performance tracking data is adaptable to your needs and can be as complicated or as simple as you like. This eBook has given examples of the interconnectedness of the data to give you an idea of how to understand your own statistics. You can quickly begin to understand how improving one aspect of the game can lead on to other areas improving. Most importantly, you can compare your statistics across different periods to see if you are improving and if your practice is working.

The free Shot Scope mobile app and web dashboard offer an invaluable hub of information that can revolutionise your game, on average Shot Scope users have lowered their handicap by 4.1 shots. If you are looking to win the monthly medal, beat your friends, or simply enjoy shooting lower scores, it is time to track.

With various laser rangefinders and GPS watches available, the future of golf is powered by Shot Scope.