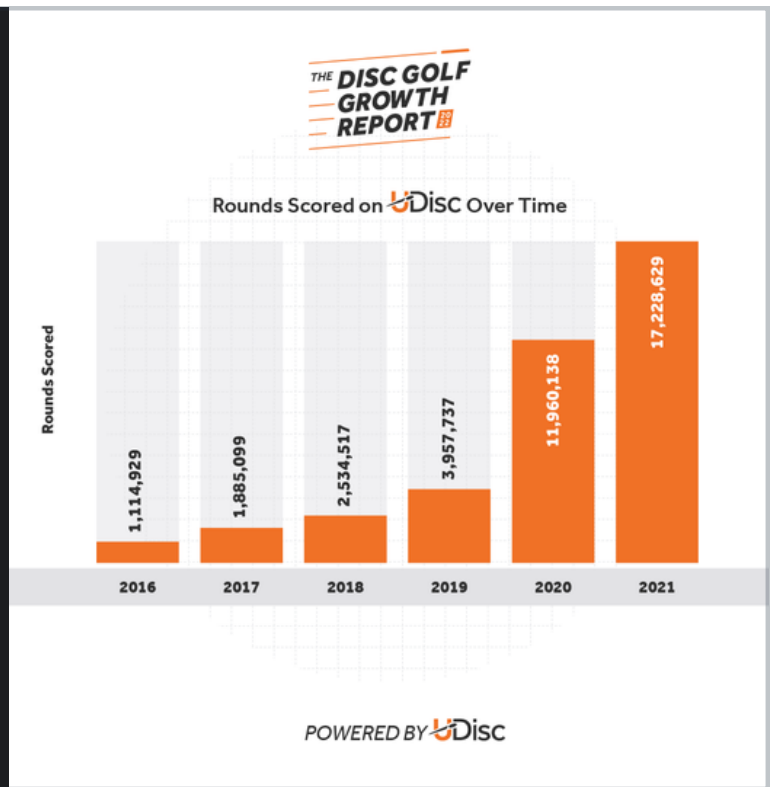# Disc Golf Analysis

This is my disc golf analysis

What is Disc Golf?

- Field sport similar to golf where instead of clubs and balls, discs (or frisbees) are thrown

- Played on courses that vary from open fields to dense woods

- Experienced significant growth during pandemic

This is just a quick visual from UDisc, a score keeping application, to visualize the explosion in growth.

Over the pandemic disc golf exploded in popularity. The low barrier to entry and ability to social distance made it a fun way to get out of the house for a few hours.

I've been playing off and on for nearly 10 years. The pandemic re-ignited my love for the sport.

Disc Golf is played in a way that is nearly identical to golf. Rounds are scored the same way, tournaments have a similar structure and there is even a professional tour.

Project Goal

Attempt to predict the winner of the 2023 Disc Golf Pro Tour (DGPT)

Technologies
- Python
- Power Bi
- Canva

Data Sources
- statmando.com
- pdga.com

The goal of this analysis is to attempt to predict the winner of the 2023 pro tour.

I made a webscraper in python to pull and aggregate player and tournament data.

I created a dashboard in power bi to get some first impressions of who may be a likely candidate.

Then I took it back to python for additional analysis and visuals.

I obtained my data from 2 sources.
Stamando.com is the unofficial disc golf data super store (where everything is free!)
PDGA.com is the official source of all things disc golf. You can find historical tournament data and some player statistics.

What's a Rating?

"Your PDGA Player Rating is a number that shows how close your average round scores are compared to the course rating, called the Scratch Scoring Averages (SSA), of the courses you've played in competition. Players who average the SSA on courses played will have a rating of 1000 and are considered "scratch players". A player who averages scores lower than SSAs on course they've played will have a rating over 1000."

TL:DR - it's a way for disc golfers to compare skill level.

Why is it important?

It is quick, easy way to assess a persons current skill level and identify trends in their game

For perspective, my rating is **833** which categorizes me as a 'Recreational Amateur.'
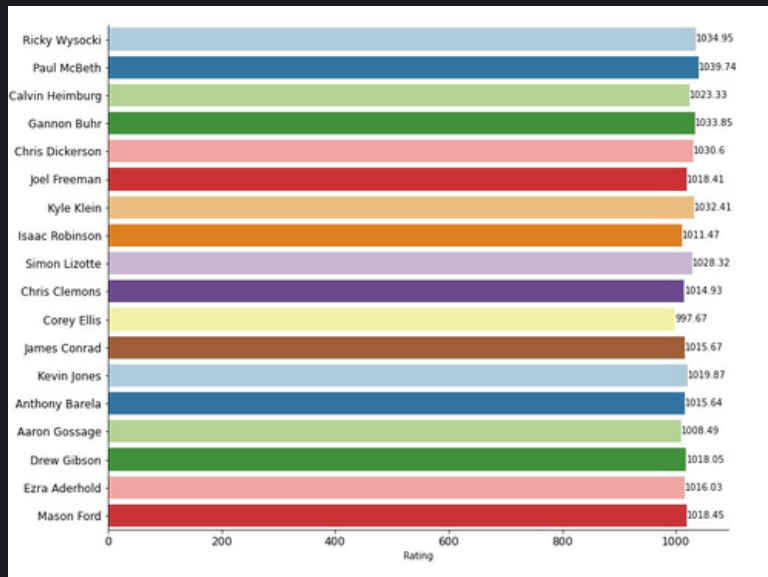
https://www.pdga.com/ratings

In order to dive into this data, there is one thing you need to be familiar with. What a rating is. Here is the exact definition; however, all you need to know is that is essentially how disc golfers are compared to one another.

You get a rating after competing in a sanctioned event. Future event performance will affect your rating, either positively or negatively depending on how well your perform. Basically, the better you do, the higher you are rated

For perspective, my rating is 833.

2022 DGPT Top 20

*Based on average lifetime rating by year

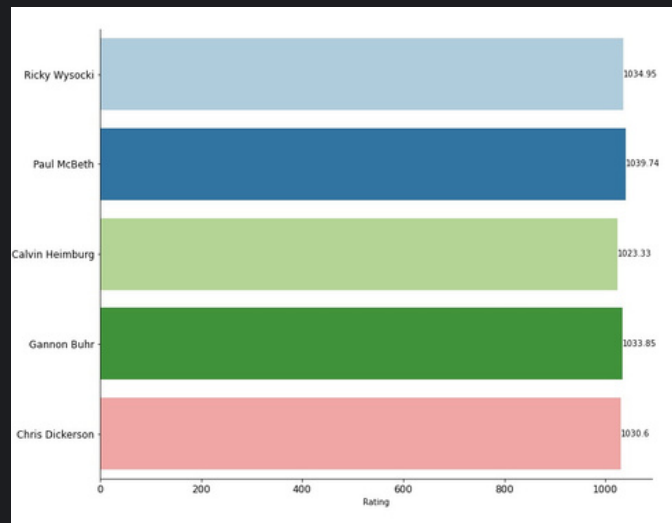On to the meat of the presentation--

Here are the lifetime ratings of the players who finished in the top 20 in the 2022 DGPT.

As you can see, pros are generally rated over 1000.

However, having a high rating doesn't necessarily mean a high placement. As you can see Corey Ellis has a rating below 1000 and he's secured a spot in the top 20.

Essentially, what I'm trying to say is, 'having a good day' won't be represented by the data.

DGPT Top 5

*Based on average lifetime rating by year

For this analysis we are looking at the top 5 finishers

Ricky Wysocki, the current champion

Paul McBeth, widely considered to be the GOAT

Calvin Heimburg, a household name in the disc golf community

Gannon Buhr, a 17yo phenom

and

Chris Dickerson, a Tennessee native

You can see here that all of their ratings are generally close together. However, one thing to note, at this level of play, adding or subtracting 8-10 points to or from your rating generally indicates a great or terrible round

What are we looking for?

Consistency

The achievement of a level of performance that does not vary greatly in quality over time.

1. Consistent performance (ie. event placement)
2. Consistent improvement
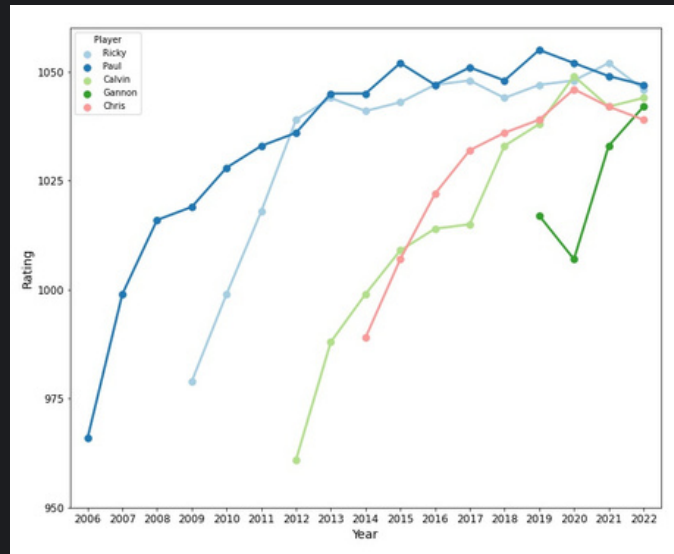   a. Rating
   b. Placement

There is 1 main criterion that is broken into 2 metrics that will be used to make my determination.

Consistency

Consistent performance, as in how maintaining a high level of play without many mistakes or bad rounds, which in turn will lead to higher placement.

Consistent improvement, as in, is there evidence that the player is making improvements from year to year, or are they stagnating, or worse, on the decline.
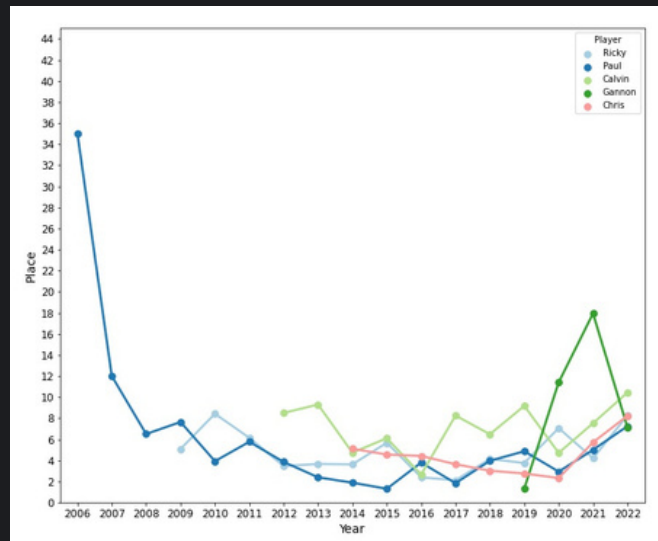
Player Ratings Time

*Based on average lifetime rating by year

First thing to look at is player ratings over time. As you can see, pretty much every player, with the exception of Gannon improved nearly every year since their first.

Like we saw before, they are all close in rating as of the data used for this analysis.

The main thing to note is the players who have been in the game the longest appear to be on the down swing in terms of rating which as we discussed previously is directly related to tournament placement
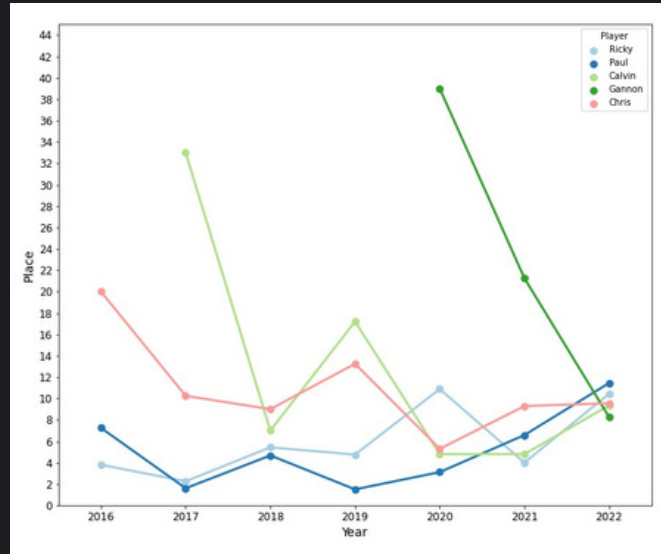
Overall Professional Placement

Here we have overall professional placement. This is the average placement per year, for all events in the data labelled as a professional event.

Like I said on the previous slide, is placement starts to get worse, the rating directly follows. You can see Ricky, Paul, Calvin, and Chris all beginning to trend negatively, while Gannon is trending positively
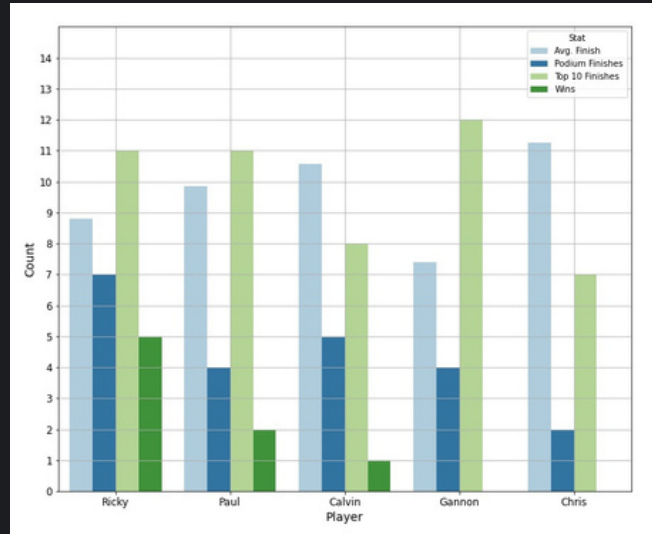
DGPT Placement Over Time

This slide shows us the DGPT placement over time.

Graph is similar to the previous graph. Showing the more seasoned players trending negative, while Gannon, the youngest trending positive.

One thing to note, professional disc golf has been around since the 70s, however, the first official Pro Tour was founded in 2016

2022 Tour Statistics

Here are statistics from the 2022 DGPT, which a series of 15 tournament weekends over the course of the year.

We have Avg Finish

Number of podium finishes

Number of top 10 finishes

and Number of wins.

You can see that Ricky won a majority of events and had decent placement which ultimately lead to him clinching the title.

Gannon and Chris both managed to land in the top 5 without winning a single tournament weekend.

Gannon had the best avg finish at roughly 7.4 indicating he played pretty consistently over the course of the year.

WHO IS GOING TO WIN?!

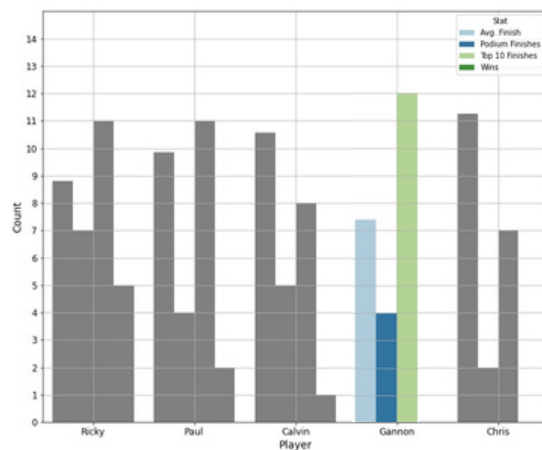So, based on all of that, who do I think will win next year?

Gannon Buhr

Based on my analysis, my money would be on Gannon.

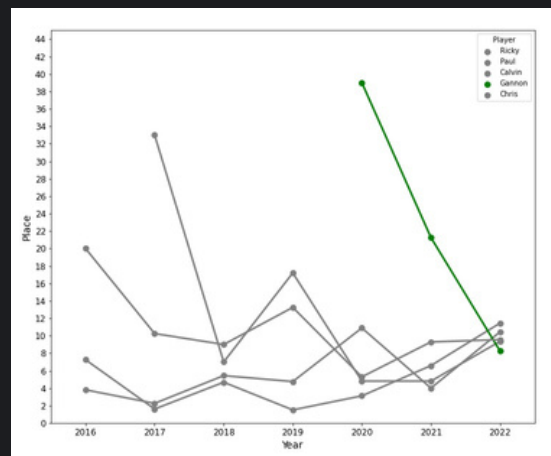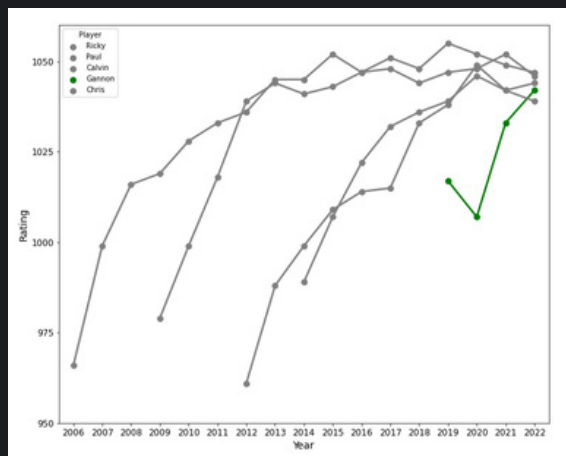Gannon is my favorite to win in 2023 for 2 primary reasons:

1. **Consistent performance**
   a. Majority Top 10 finishes
2. 2. **Consistent Improvement**
   a. Rating is trending up
   b. Avg. tournament placement is trending down (which is good!)
   c. Stand out at a young age, leaving plenty of room for additional improvement

As you've seen, he is a consistent performer with the best avg finish and most top 10 finishes

Additionally, even though the sample size is small since he's so young, the data indicates that his avg pro tour placement is trending positively and as I've said before, his rating is moving right along with it.

As you've seen, he is a consistent performer with the best avg finish over the course of the pro tour in 2022 and most top 10 finishes. The only thing he's missing in this regard are a few wins

Additionally, even though the sample size is small since he's so young, the data indicates that his avg pro tour placement is trending positively and as I've said before, his rating is moving right along with it.

So, based on this, Gannon is my pick to win in 2023

Questions?

Any questions?