

The PADA Ranking system

- THE CURRENT STATE OF THE PADA RAKING SYSTEM
- HOW WE LEVERAGE THE RANKINGS TO CREATE OUR DIVISIONS



Today Ranking system

PADA does not have a handicap system...

What we do is group teams with similar

Rank Levels into divisions & play strait up head to head Darts

There is no linkage between the Divisions Names and a Players Ranking

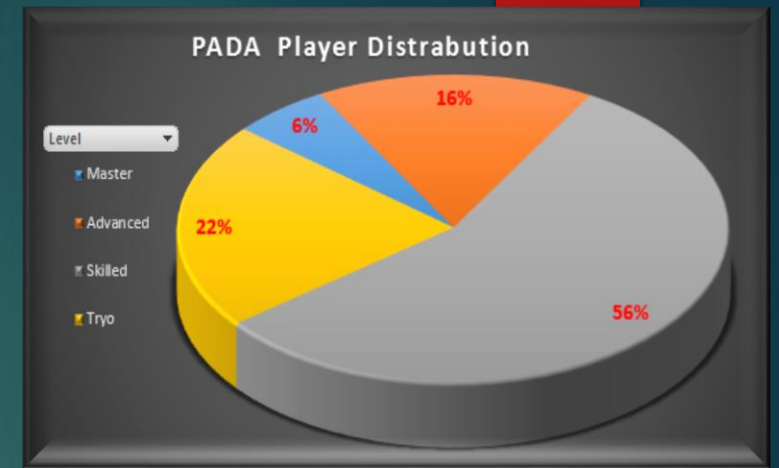
The Math = (SeasDivAveSeg X PlrWin%) X 2 then average last 6 seasons = CrntPlayers Ranking

The algorithm is statistically valid as long as we don't introduce significant deviations (σ_x)

▶ **The algorithm has worked well over the years when used. It is based on winning Legs!**

However it does have some anomalies...

- ▶ Players can boost/reduce their ranking by playing in divisions above/below their skills. Players on a team should be relatively close to each other in rank to minimize anomalies.
- ▶ Players perception of their skill level should be based on their Ranking and not the division they are in ... That is a number rather than a division name. *You could call the division colors if you liked*



Note: 6 season = a rolling 2 years of play... Fall, Spring and Summer (if played).

Rack-em & Stack-em

How we use the rankings to build the divisions

Today, we use the players current rankings to build a team ranking and then stack them against each other



- ❑ By automating the player ranking system we can use the data to quickly build the divisions
- ❑ We still use other factors as judgment when placing a team, (e.g. team preference or previous season winners) but this is limited to reduce the possibility of introducing anomalies into the algorithm

“ $\sigma X (\Delta)$ ”

***1st right of refusal to the Regular Seasons Division Winners
(and only if the returning team retains 4 of its seasons players)***

2013 Team Ranking

A	Bullies	14.03
A	Dogs	13.49
A	Shock and Awe	12.12
A	4Pro	12.04
A	Hot Rats	8.13
A	Scoregasm	8.00
B	No Fumares	7.96
B	Ballad Boys	7.93
B	The Shafters	7.01
B	Dubliners	6.65
B	IRD - Celtic Atomics	6.58
B	Bulls Deep	4.52
C	The Couve Crue	5.67
C	Trip City	4.96
C	The Breakfast Club	4.34
C	The Cartel	4.30
C	Lick My Bulls	3.90
C	Sellwood Scoundrels	3.65
D	The Biatches	3.69
D	The Good The Bad The Evil	3.62
D	Hobgoblins	2.45
D	The Sofa King Luckies	2.35
D	One of These Days Alice	2.21
D	River Chimps	1.92
E	Moonshine	4.57
E	The Clay Fade	2.02
E	Team Wolfram	1.89
E	Havin Fun	1.83
F	SPHing Newbies	2.58
F	Rented Mule	2.55
F	The Mechanics	2.53
F	East Side Riff Raff	1.58

The Math detail...

PlrWin% = win / lose % for a players season

SeasDivAveSeg = the average of all players in the division segment for that season
e.g. Division "C" = 4.4681

(SeasDivAveSeg X PlrWin%) X 2 = Season-R
a players season ranking
(in "C" 0% win = Min 0.0 rank, 100% win = Max 8.9 rank)

The average of the last 6 season =
a players "**Current Ranking**"

That is 2 years based on a Spring, Summer and Fall year

BULListic 2013					
	2012 FALL	2012 SPRING	2013 FALL	2013 SPRING	Current Ranking
BRIAN JACKSON	10.24	11.03	11.01	14.04	11.58
GARY CRUZ	10.50	9.63		4.59	8.24
JIM NICHOLS	9.04	10.60	9.34	9.26	9.56
JOSH MEDINA	11.44	8.43	9.45	11.59	10.23
Grand Total	10.30	9.92	9.93	9.87	10.01

The process of calculating the rankings is easier to complete

- We automate as much of this as possible, using tools that are accessible to most people
- We include summer singles in the mix as these generate more accurate data for a player

Process

- ✓ **Scrape the data from League Republic**
(Name, Division, Leg Win/Loss%...)
- ✓ **Add the seasons detail to the PADA historical data base**
- ✓ **Run the pivot table averages**
- ✓ **Publish the result as a PDF**

Note: A New player is automatically given an ranking for the division they start in.

We can convert Soft tip Handicaps into equivalent PADA ranking.

