Predicting the MVP and DPOY in 19-20 season

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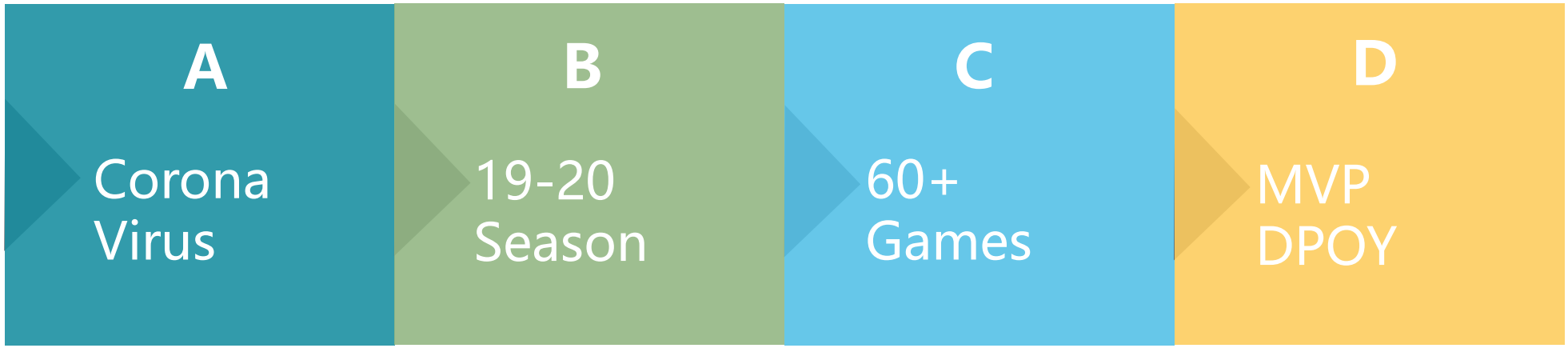
1 Introduction

Problem

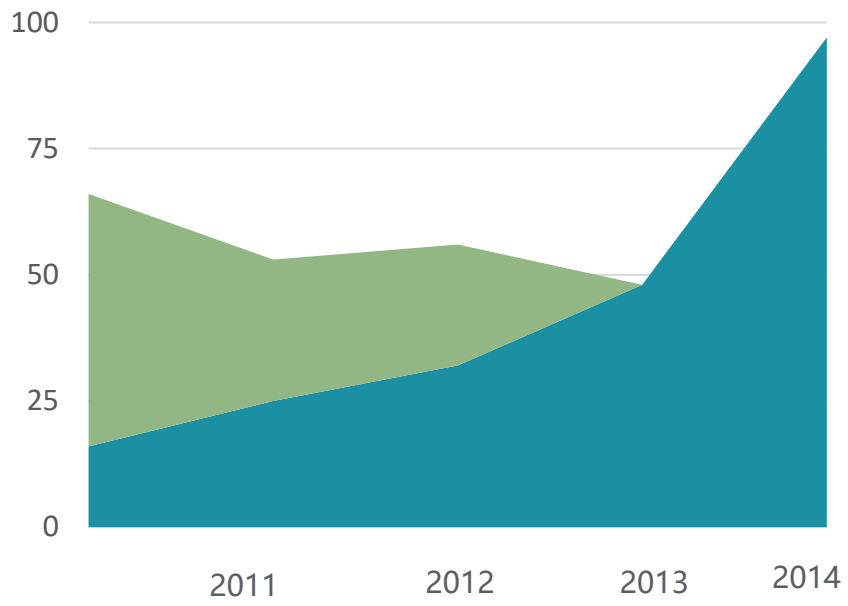
Interest

Problem



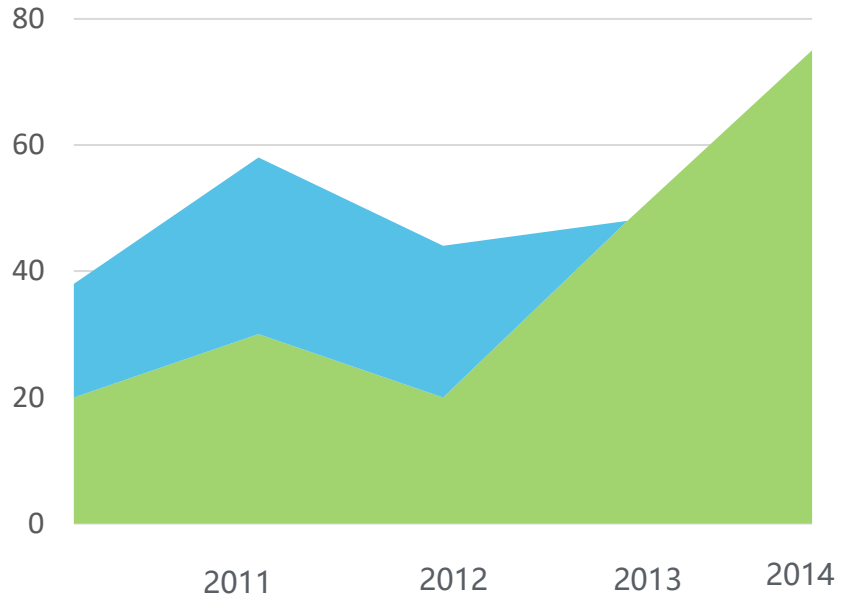
The influence of corona virus let the 19-20 season had only 60+ games.
This project aims to predict MVP and DPOY of this season.

Interest



Fans

Will my favorite star win the award?



Players

Who is my competitor?

2

2

Data

Sources

Features

Sources

Website

From: http://www.stat-nba.com/

Requirement

played 25 or more games

averaged 25 minutes or more per game

Index

player, rebound, D_rebound, assist, steal, block, turnover, foul, point, win, MVP, DPOY

Features

Scale

151 rows (1 head and 150 players)

12 columns (12 index)

MVP

+ point + assist + rebound + steal + block

– turnover

DPOY

+ Defensive rebound + steal + block

– foul

Pictures

player	rebound	D_rebound	assist	steal	block	turnover	foul	point	win	MVP	DPO
扬尼斯-阿德托昆博	13.7	11.5	5.8	1.1	1.0	3.7	3.0	29.7	48	47.6	10.6
詹姆斯-哈登	6.3	5.3	7.4	1.7	0.9	4.4	3.4	34.4	39	46.3	4.5
卢卡-东契奇	9.3	8.0	8.7	1.1	0.2	4.2	2.5	28.7	34	43.7	6.8
勒布朗-詹姆斯	7.9	6.9	10.6	1.2	0.5	4.0	1.8	25.7	47	42.0	6.8
安东尼-戴维斯	9.4	7.1	3.1	1.5	2.4	2.4	2.5	26.7	43	40.7	8.5

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3 Analysis

- Methodology
- MVP
- DPOY

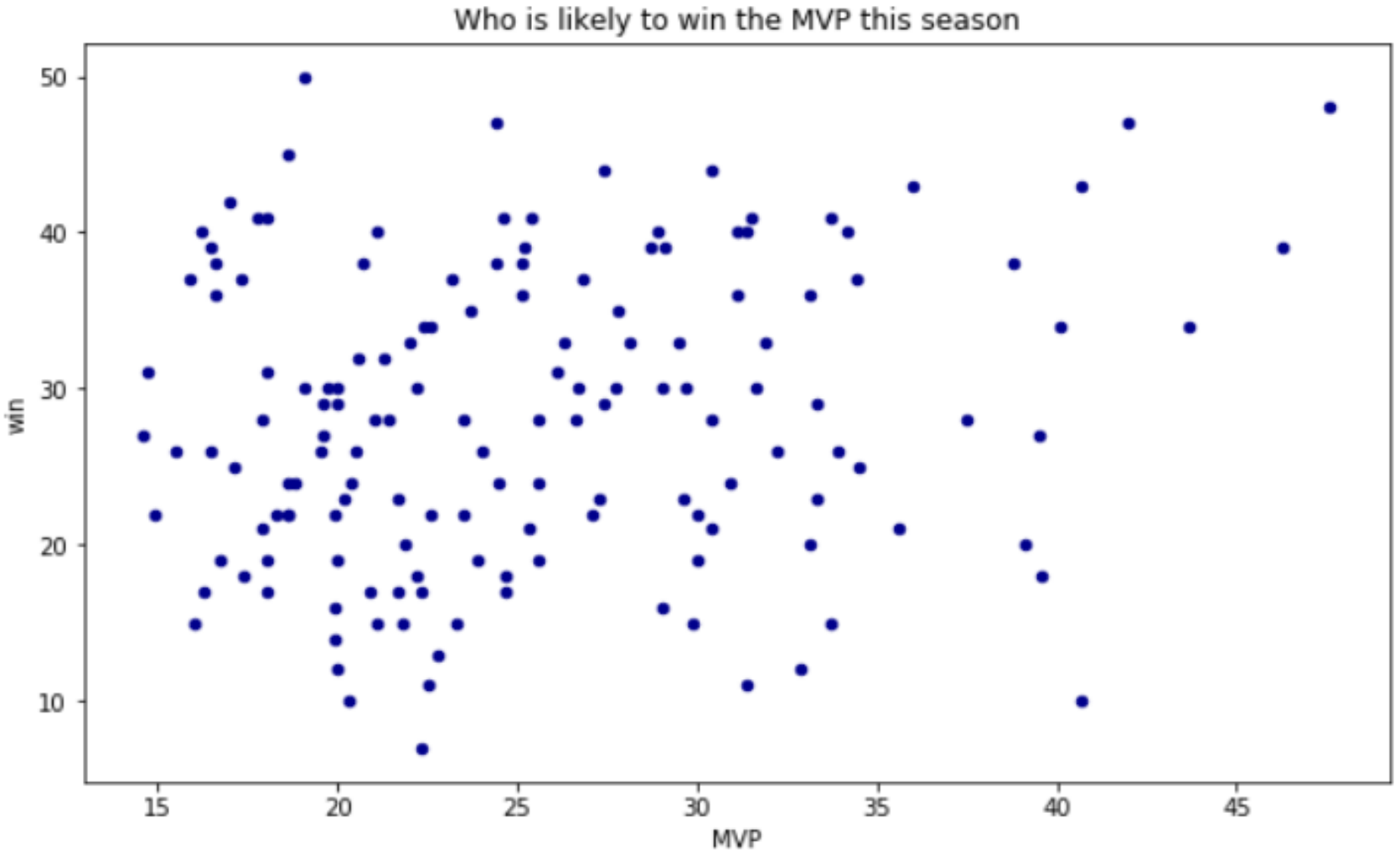
Methodology

K-MEANS CLUSTERING

1. Show which players are the potential competitors of the rewards

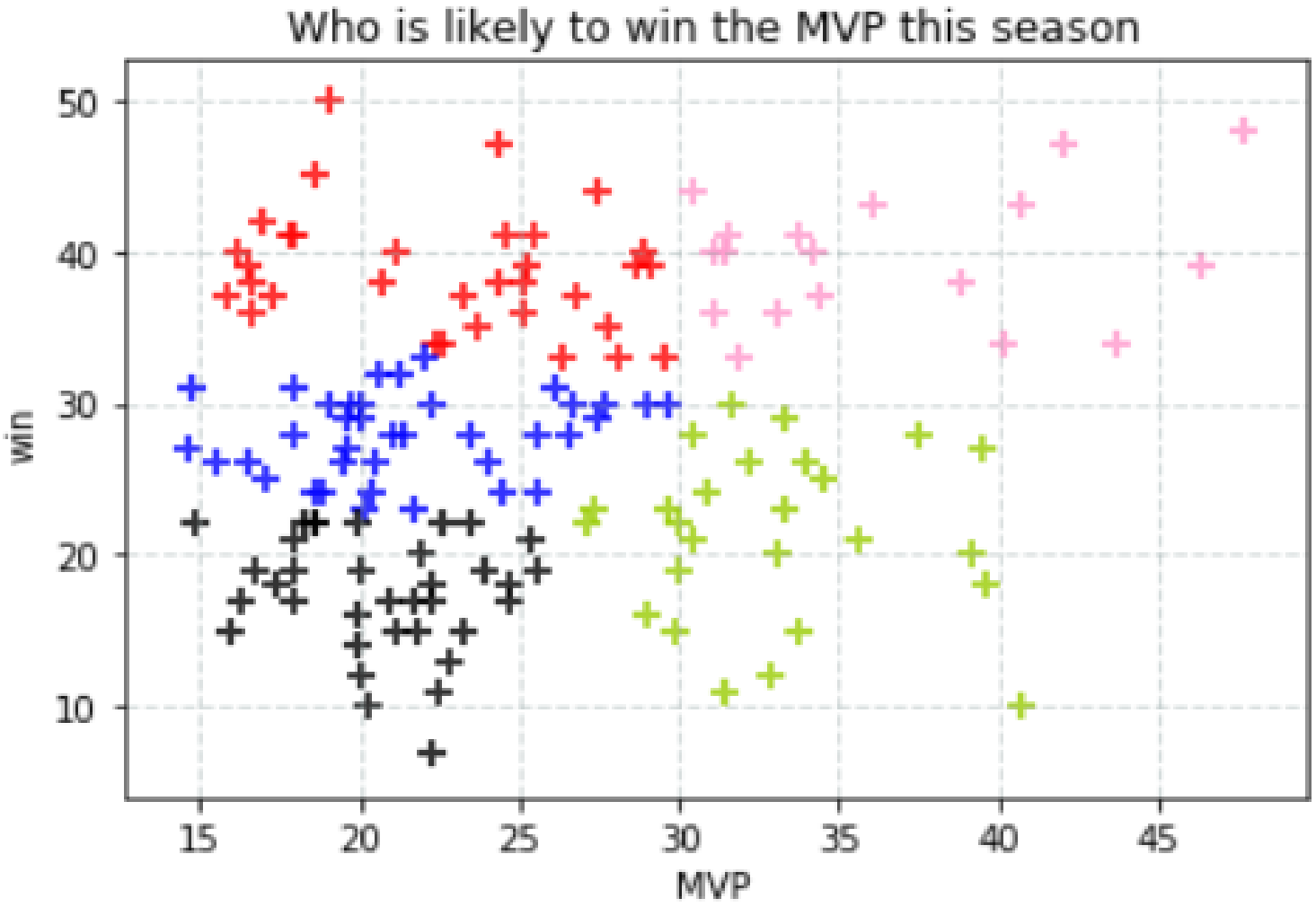
2. help one to find which level does one’s favorite player belong to

MVP



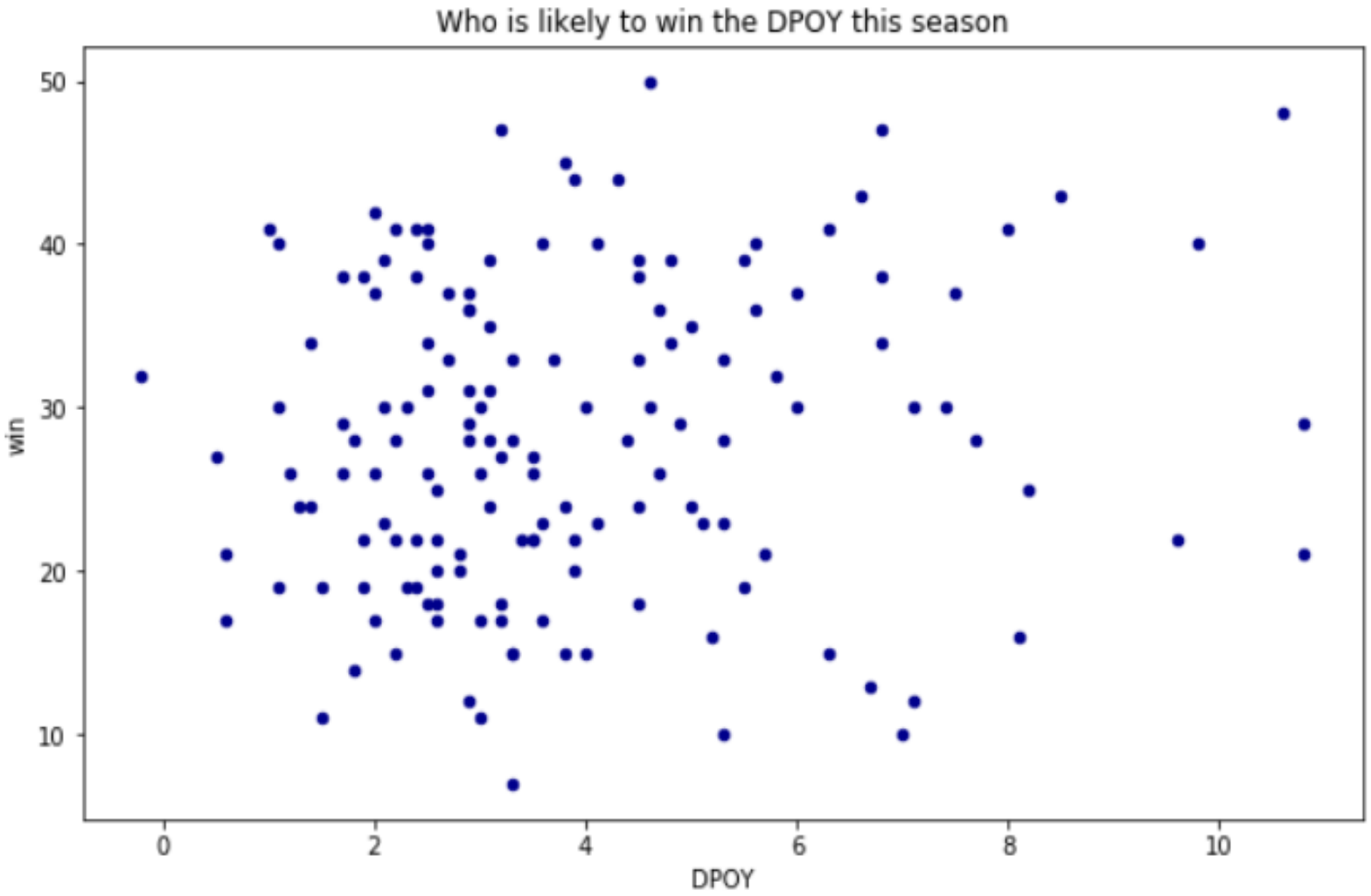
It seems to have 5 clusters

MVP



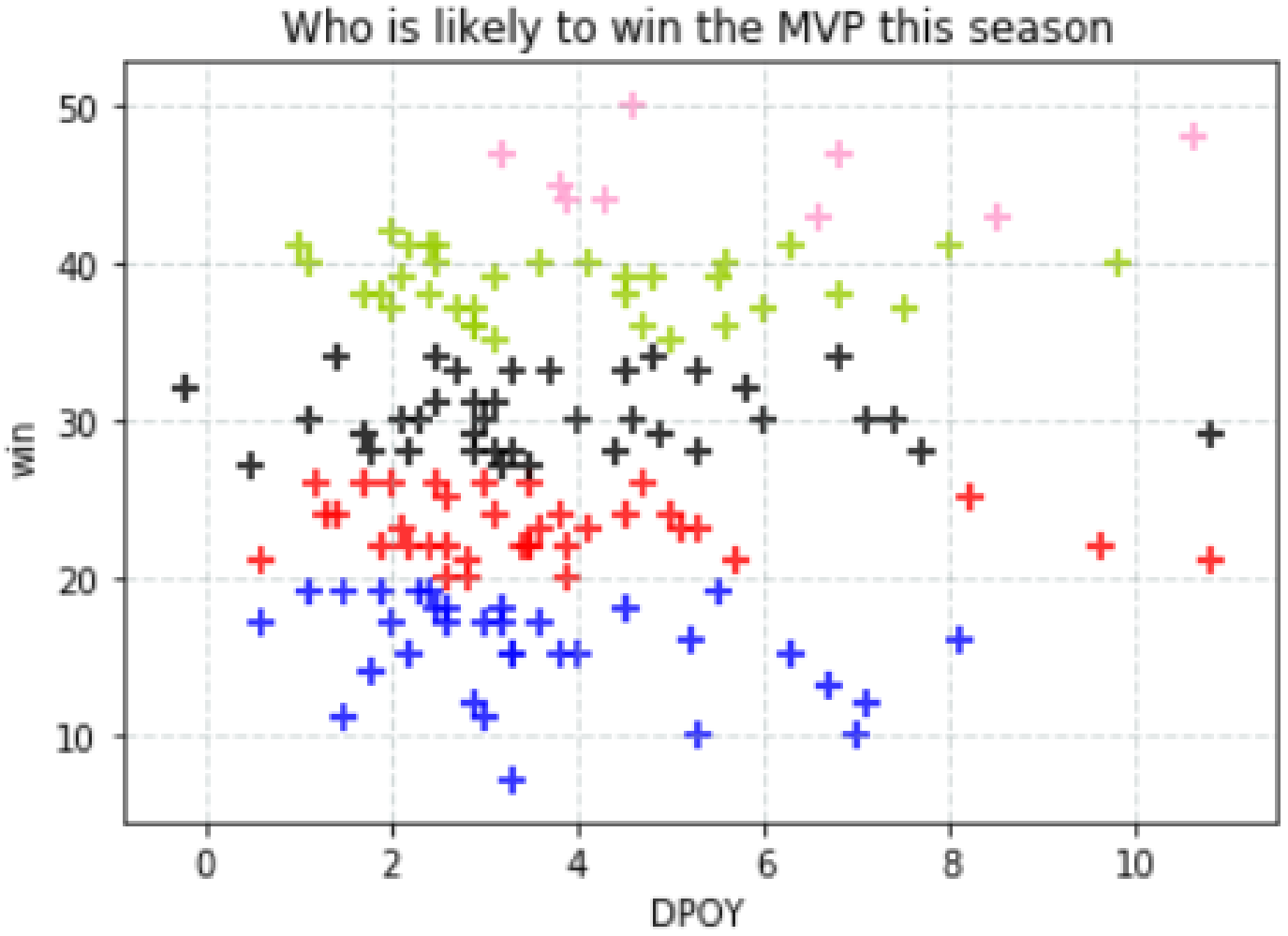
we can see the 5 groups. It seems that the MVP consider both the value of MVP and the number of winning games.

DPOY



It also has
5 clusters

DPOY



It seems that the number of winning games have a big influence on the DPOY

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4 Results

- MVP
- DPOY

MVP

A Antetokounmpo

B Lebron

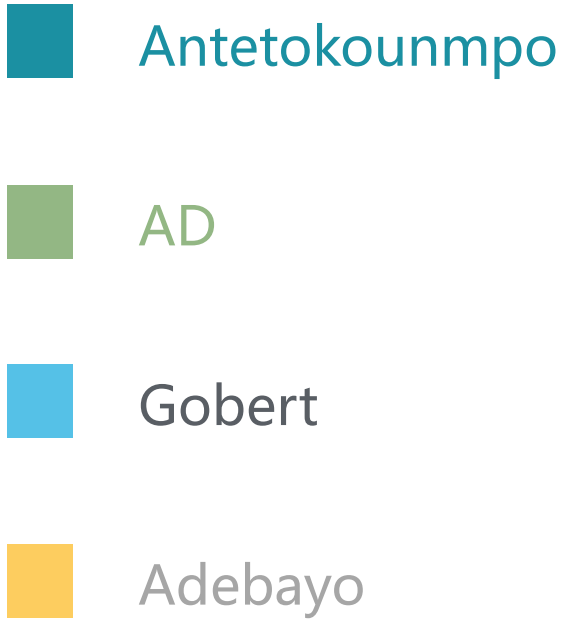
C Doncic

D Harden

Player	The Value of MVP	The Number of Winning
Giannis Antetokounmpo	47.6 1st	48 5th
Lebron James	41.9 4th	47 7th
Luka Doncic	43.8 3rd	34 65th
James Harden	46.3 2nd	39 32th

DPOY

Player	The Value of DPOY	The Number of Winning
Giannis Antetokounmpo	10.6 3rd	48 5th
Anthony Davis	8.5 6th	43 13th
Rudy Gobert	9.8 4th	40 25th
Bam Adebayo	8 9th	41 18th



THE END
THANKS