



# 2022 World Cup Analysis

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# Agenda

- |   |                                     |
|---|-------------------------------------|
| 1 | • Background and Summary Statistics |
| 2 | • Principal Component Analysis      |
| 3 | • Summary                           |







# Background

- Held every 4 years
- 32 total countries qualify
- Winner: Argentina
- Runner Up: France
- Third Place: Croatia



## WORLD CUP 2022 TEAMS BY POPULATION





# Summary Statistics

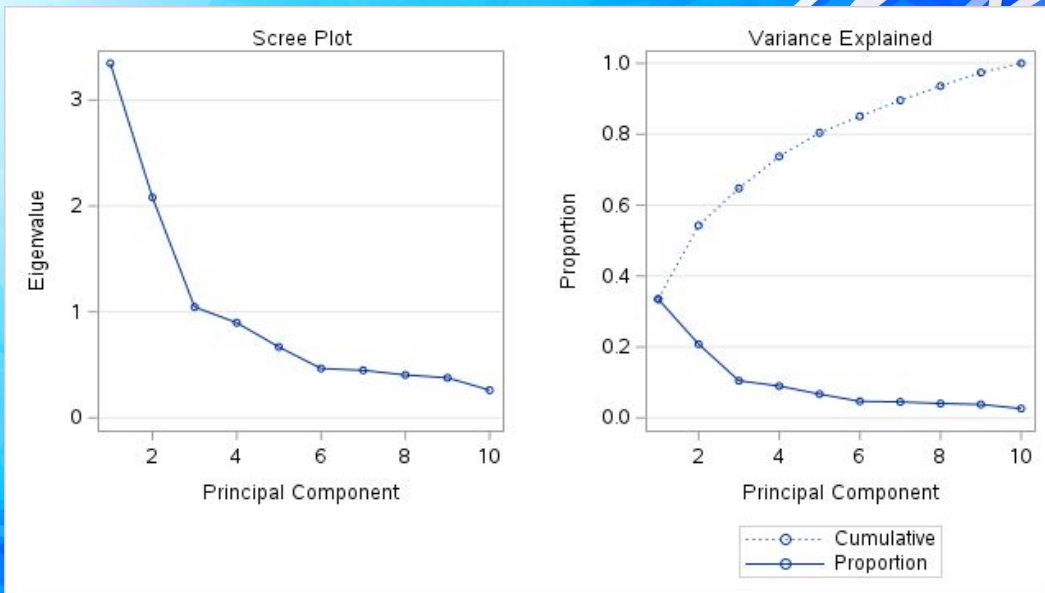
The MEANS Procedure

Variable	N	Mean	Std Dev	Minimum	Maximum
Gls	680	0.250	0.699	0.000	8.000
Ast	680	0.178	0.488	0.000	3.000
Shots	680	2.107	3.032	0.000	29.000
Successful_dribbles	680	1.085	2.200	0.000	25.000
Crosses	680	3.201	5.563	0.000	40.000
Age	680	26.587	4.161	17.000	39.000
Tackles_made	680	3.041	3.550	0.000	26.000
Blocks	680	2.109	2.373	0.000	13.000
Interceptions	680	1.569	2.082	0.000	14.000
Clearence	680	3.534	5.017	0.000	37.000





# Principal Component Analysis



	Eigenvalue	Difference	Proportion	Cumulative
1	3.34707787	1.26623703	0.3347	0.3347
2	2.08084084	1.03480316	0.2081	0.5428
3	1.04603768	0.14824312	0.1046	0.6474



# Principal Component Analysis

- **PC1:**

- Appears to be representing the average of the statistics of every player. We can see similar values between almost all categories.

- **PC2:**

- Appears to be representing a comparison between defense vs offense metrics. We see similar values between each category.

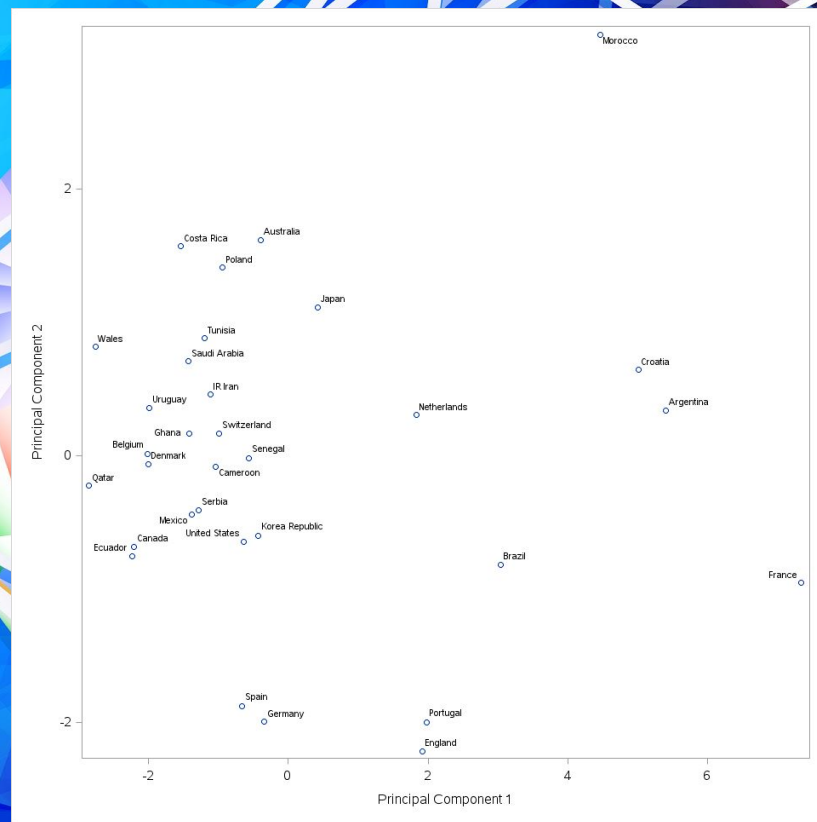
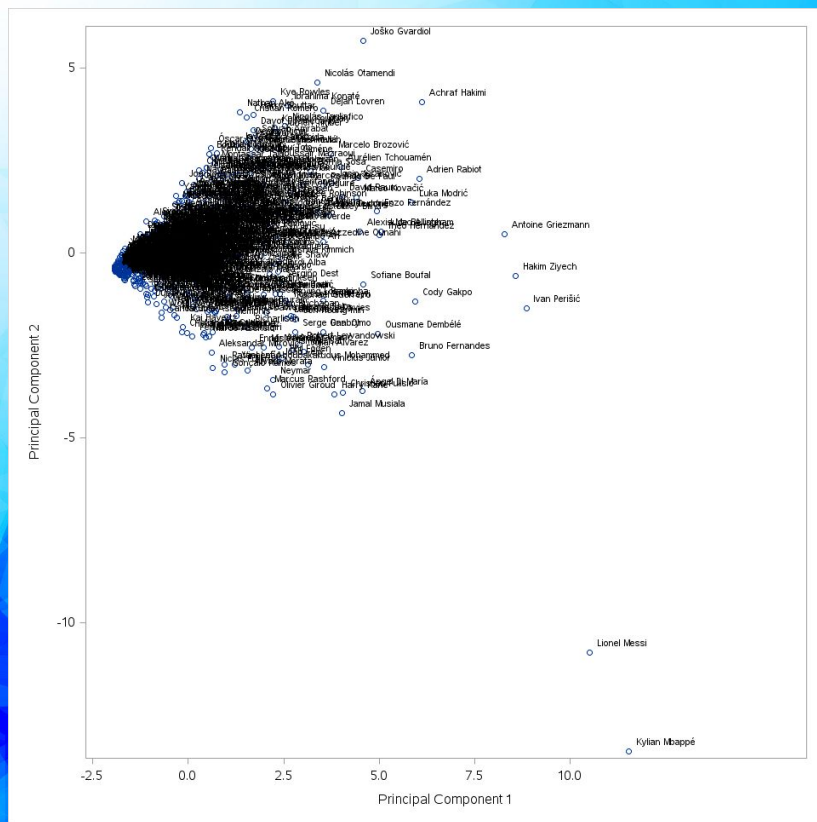
- **PC3:**

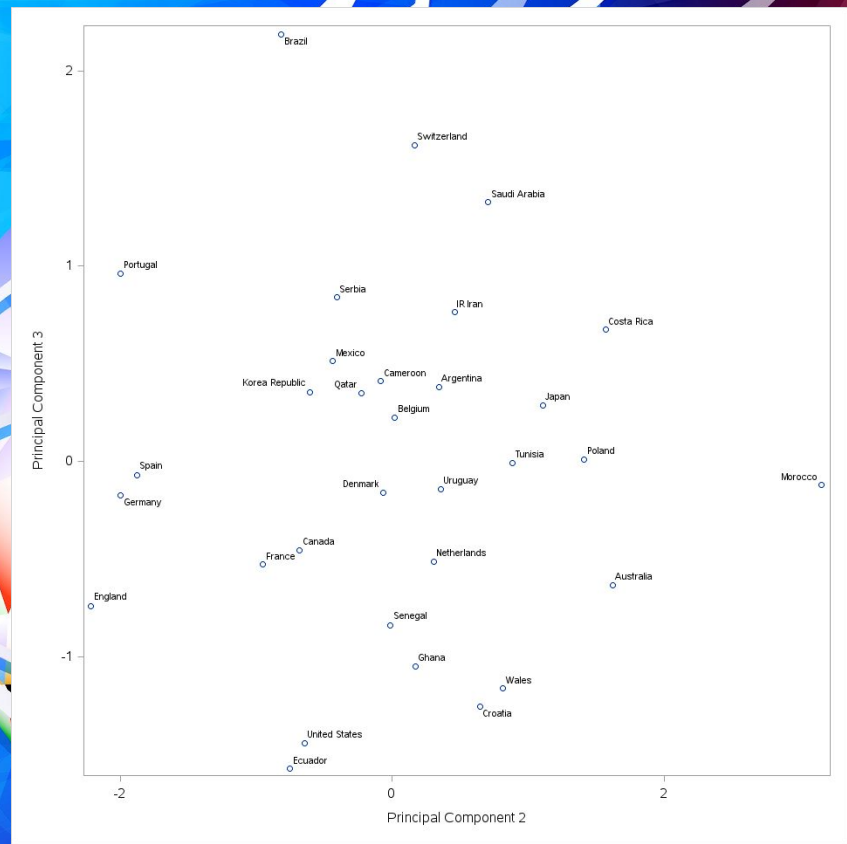
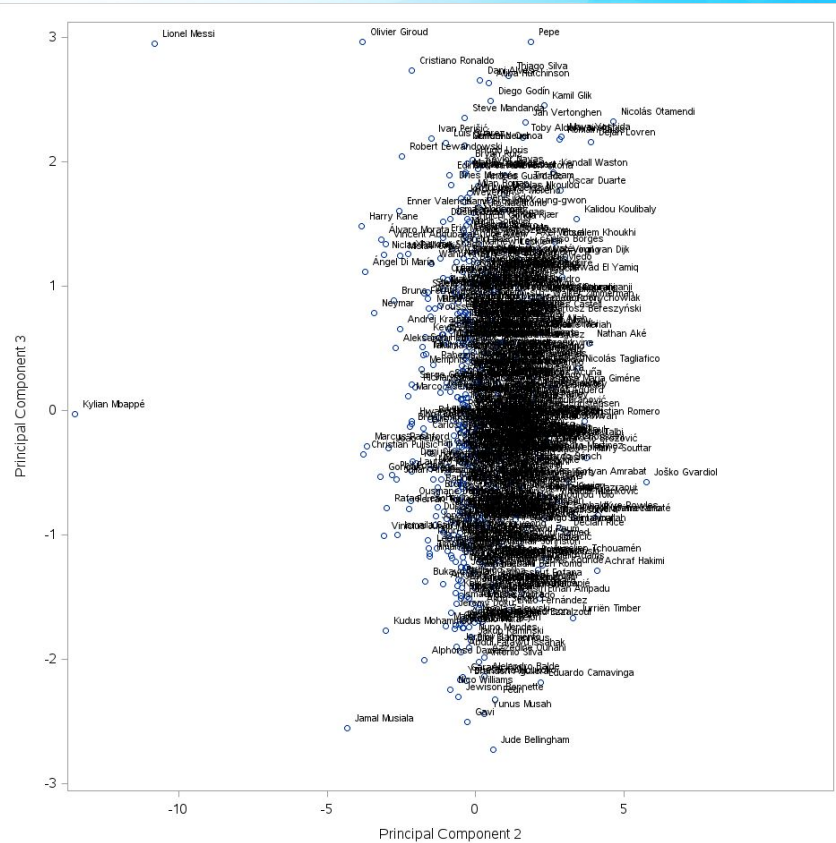
- Prin3 appears to be based around age, as this variables principal component three value stands out compared to the others. We can interpret this PC as dealing with a player's experience

	Prin1	Prin2	Prin3
Gls	0.270142	-.402143	0.113846
Ast	0.321391	-.189834	0.144400
Shots	0.366982	-.378729	0.056503
Successful_dribbles	0.347927	-.296664	-.138654
Crosses	0.347910	-.142465	-.017343
Age	-.003990	0.031939	0.939967
Tackles_made	0.372440	0.321602	-.116618
Blocks	0.389655	0.277939	-.103234
Interceptions	0.326922	0.407826	0.005417
Clearence	0.222538	0.449981	0.188798

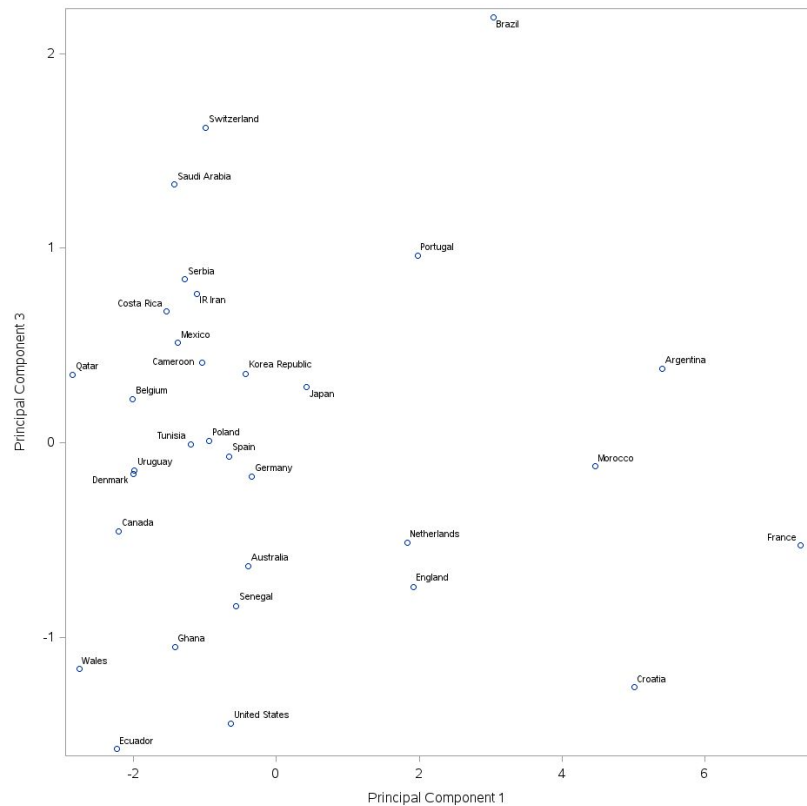
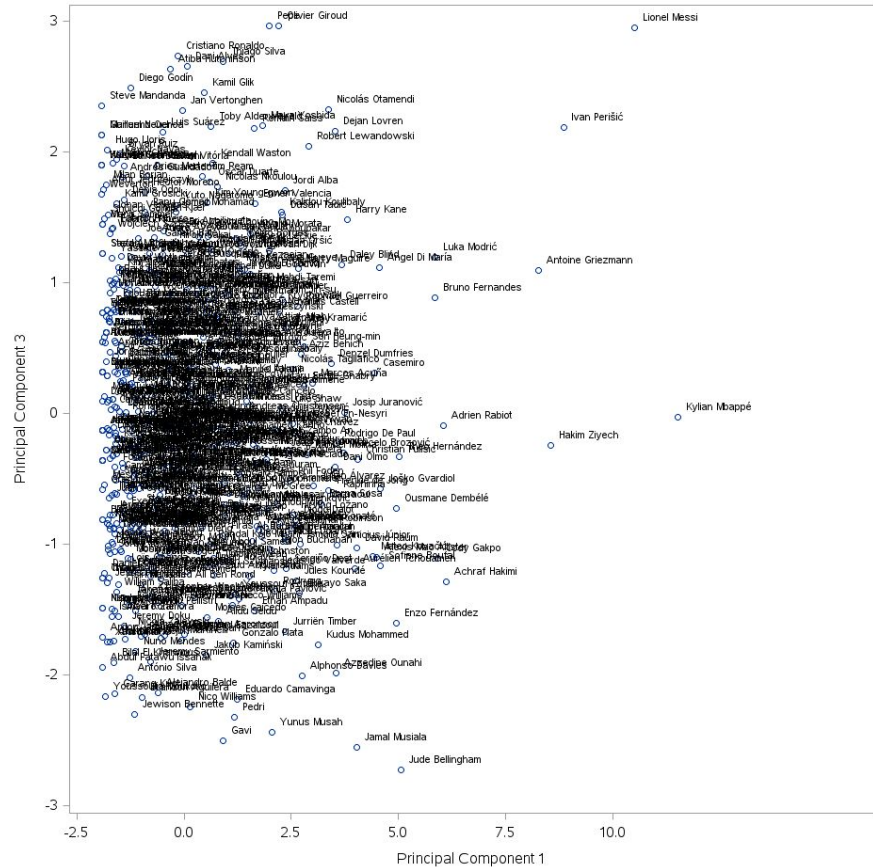














**Thank You!**

