

FC RStats First Analytics Challenge: Replacing Nikita Parris

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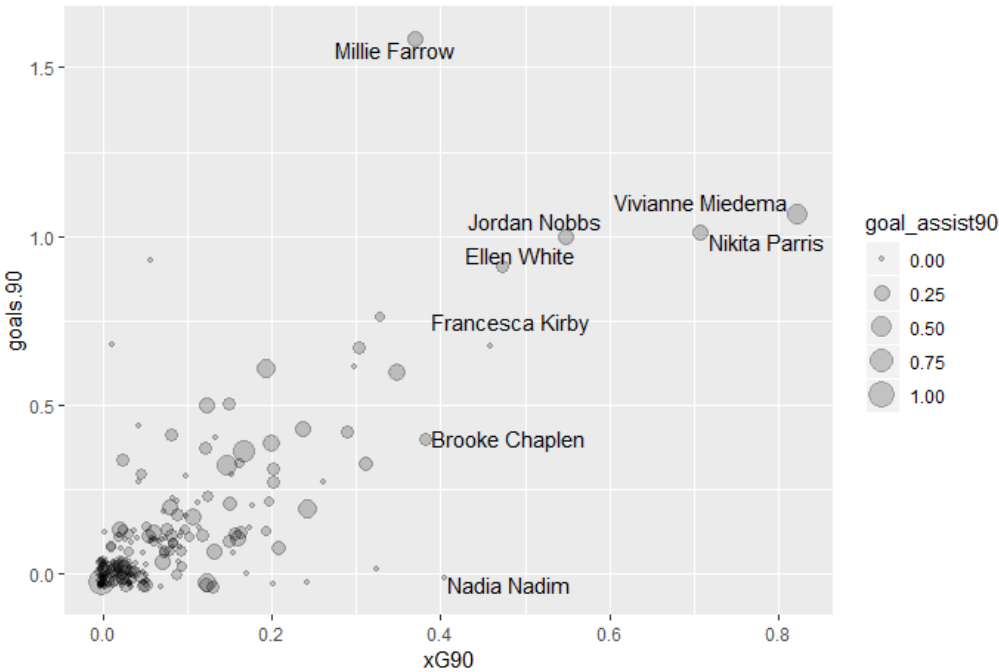
Method

The following steps were done:

- 1) First i got all event data from FA Women's Superleague Statsbomb free dataset and did all necessary parsing and transformation process.
- 2) Then, i calculated different metrics in order to explore the complete performance of Nikita along the season to use it as reference, including general information (number of matches, minutes played, goals, shots, passes, etc.) and the info more refined (xG, complete passes, assists, dribbles and their respective values per 90 minutes). Also i plotted a shotmap. Due my short available time, i didn't consider info about pressures, "juego de posición", heatmaps or another of this kind of analysis.
- 3) I wrote some own functions in R to facilitate the metrics calculation for all those mentioned players and also for make visualization which do easier comparison between the performances.
- 4) After that, i defined 2 main criteria to get some candidates to evaluate performance and compare them with Nikita: a) Number of goals and, b) Sum of xG. This way i choose 6 players to after do a deeper analysis and rank them.

	player.name	team.name	num_goals
1	Vivianne Miedema	Arsenal WFC	21
2	Nikita Parris	Manchester City WFC	19
3	Danielle van de Donk	Arsenal WFC	11
4	Fara Williams	Reading WFC	10
5	Georgia Stanway	Manchester City WFC	10
6	Courtney Sweetman-Kirk	Liverpool WFC	9
7	Bethany England	Chelsea LFC	8
8	Jordan Nobbs	Arsenal WFC	8

	player.name	team.name	sum_xG
1	Vivianne Miedema	Arsenal WFC	15.64
2	Nikita Parris	Manchester City WFC	13.51
3	Francesca Kirby	Chelsea LFC	6.42
4	Danielle van de Donk	Arsenal WFC	6.26
5	Brooke Chaplen	Reading WFC	6.07
6	Jane Ross	West Ham United LFC	5.53
7	Courtney Sweetman-Kirk	Liverpool WFC	5.45
8	Bethany England	Chelsea LFC	5.34


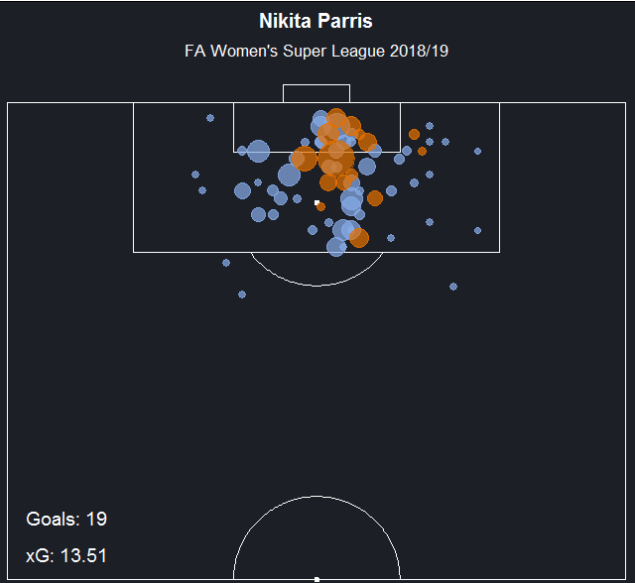


Since Nikita play mainly as forward i discarded players who play mainly as midfielders although these would have a good performance (Fara Williams y Danielle van de Donk). Also i discarded Georgia Stanway because she belongs to Manchester City as well.

- 5) Finally i discarded 4 players, seeing radar plots and prioritizing this metrics: goals90, xG90, assist90, goal assist90, completed dribbles90 and completed passes proportion.

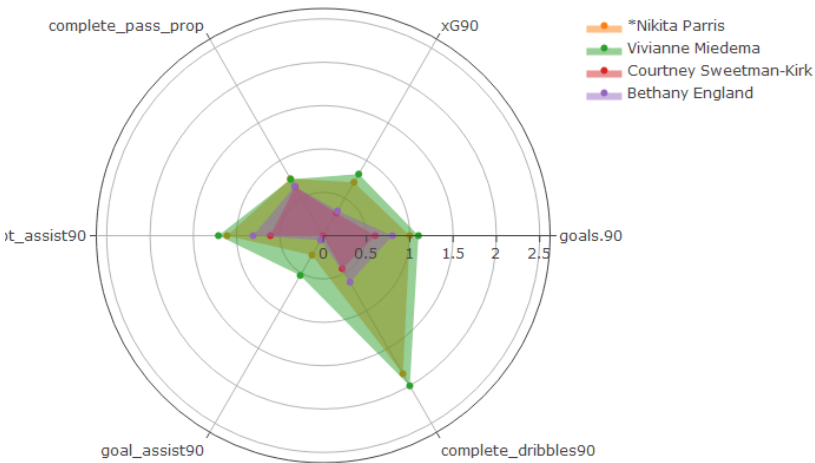
About coding skill, to do this work i used mainly dplyr pipelines, the mentioned own functions, and the following R packages: StatsbombR, Tidyverse, Soccermatics and Plotly.

[Here](#) you can find the complete code with details and comments. Enjoy it!

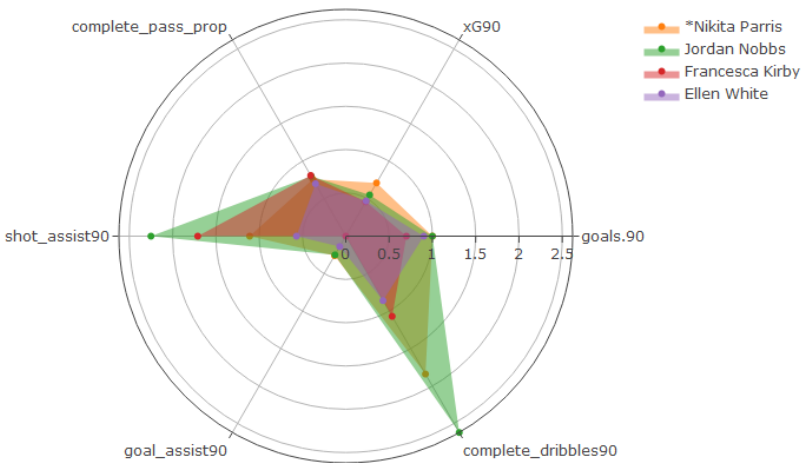
Nikita Parris - Season 2018/19							
		<div><div>Nikita Parris</div><div>FA Women's Super League 2018/19</div><div>Goals: 19 xG: 13.51</div></div>					
Club	Profile	Matches played					
Manchester City	Striker	19					
Goals (Penalty)	Shots	Shots per Goal					
19 (4)	70	3.7					
Minutes played	xG	xG per shot	xG90	Goal assist90	Shot assist90	Completed dribbles90	Completed pass prop.
1653	13.51	0.19	0.71	0.26	1.11	1.84	0.76

Comparison:

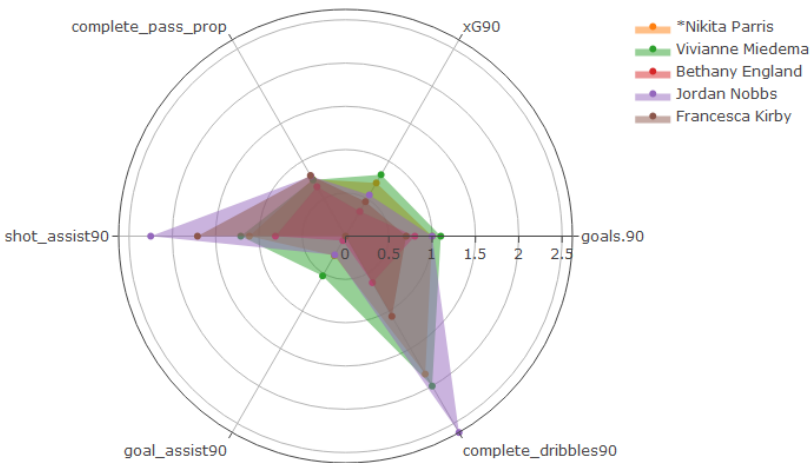
1st group, result: Courtney Sweetman-Kirk OUT



2nd group, result: Ellen White OUT



Final stage, result: Bethany England OUT (little differences related to Kirby's performance)



So, the 3 players choosen to replace Nikita are: Vivianne Miedema, Jordan Nobbs & Francesca Kirby.