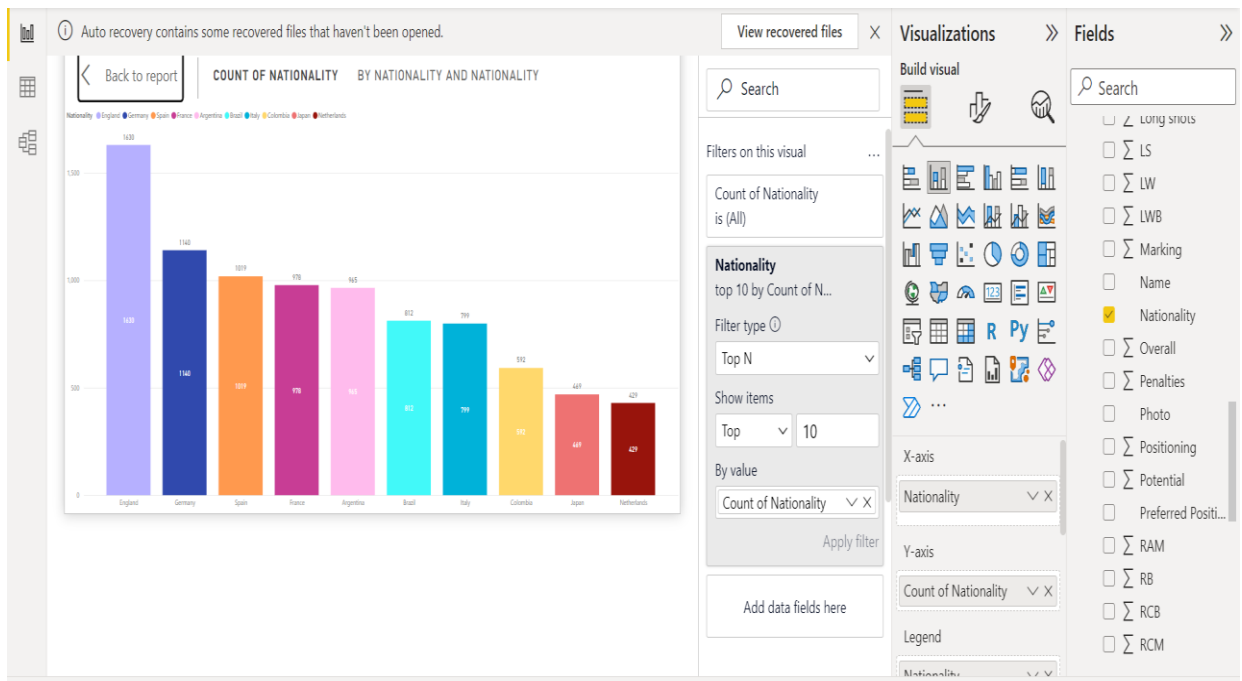
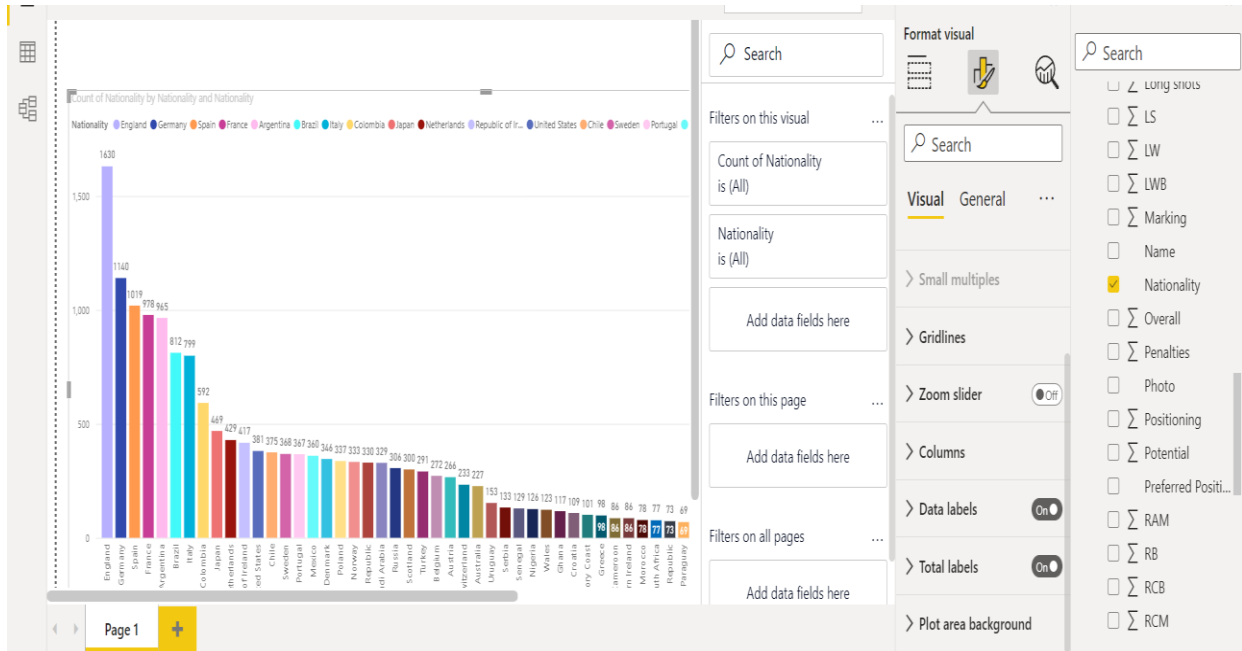


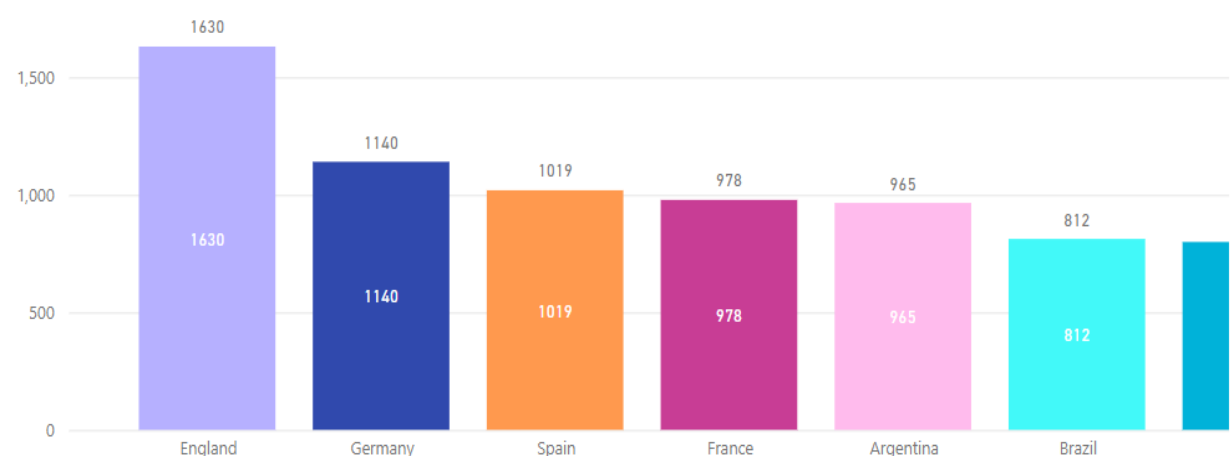
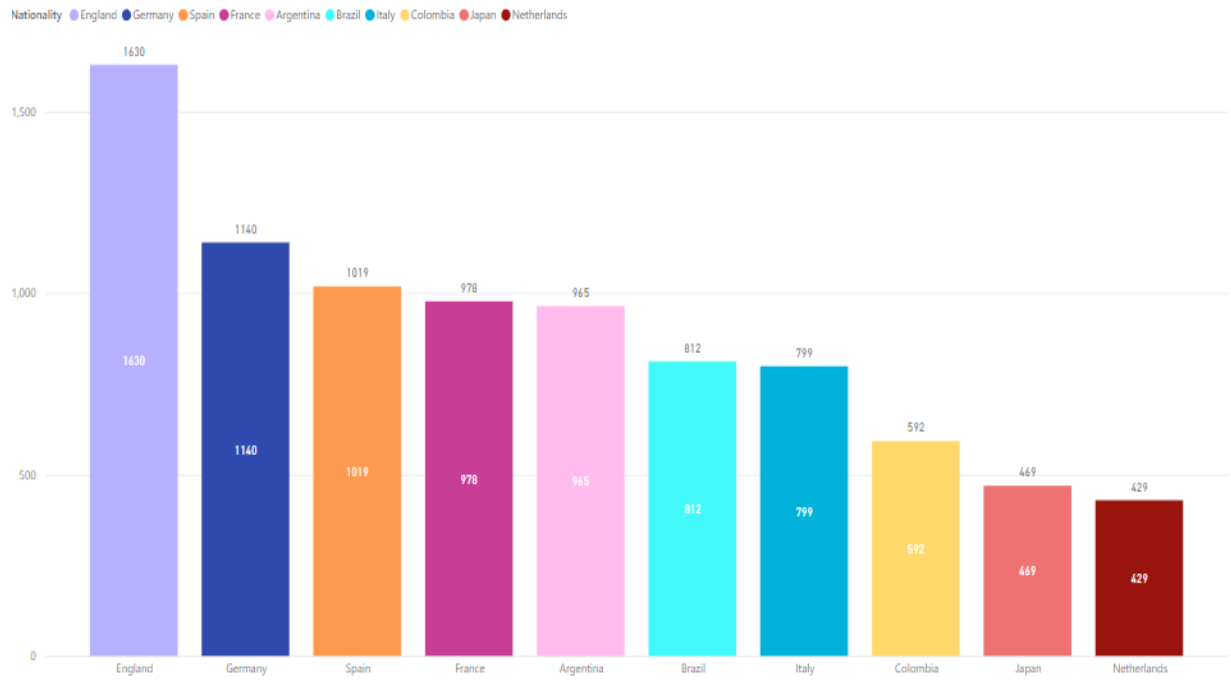
# Great Learning Assessment Power Bi

## Ishita Sarkar

1). Prepare a rank ordered list of top 10 countries with most players. Which countries are producing the most numbers of footballers that plays at this level?



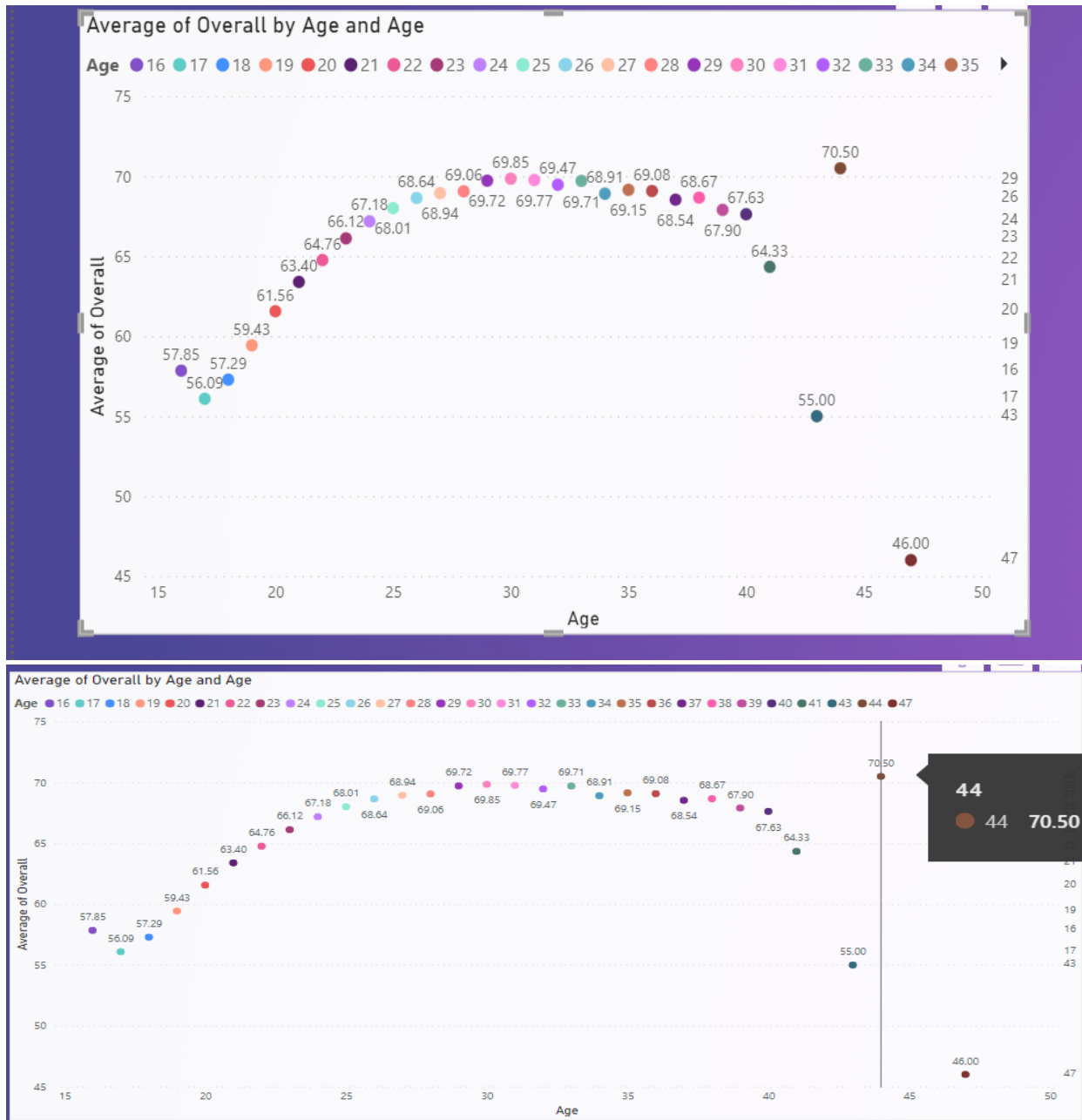
## Great Learning Assessment Power Bi Ishita Sarkar



Nationality	Count of Nationality
England	1630
Germany	1140
Spain	1019
France	978
Argentina	965
Brazil	812
Italy	799
Colombia	592
Japan	469
Netherlands	429

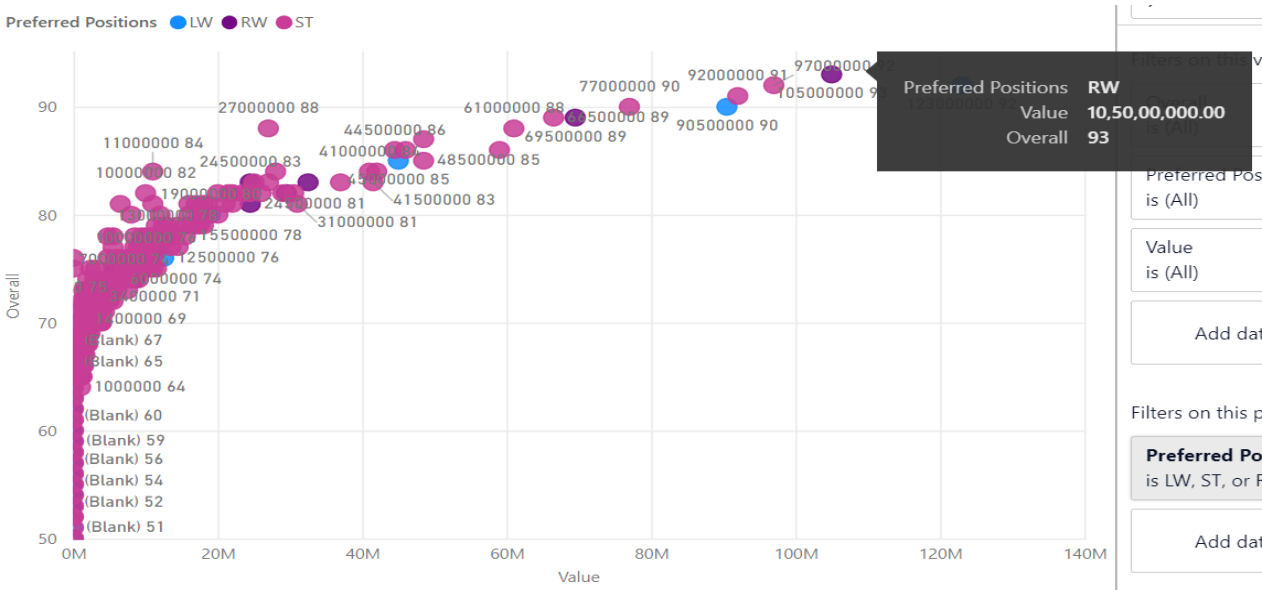
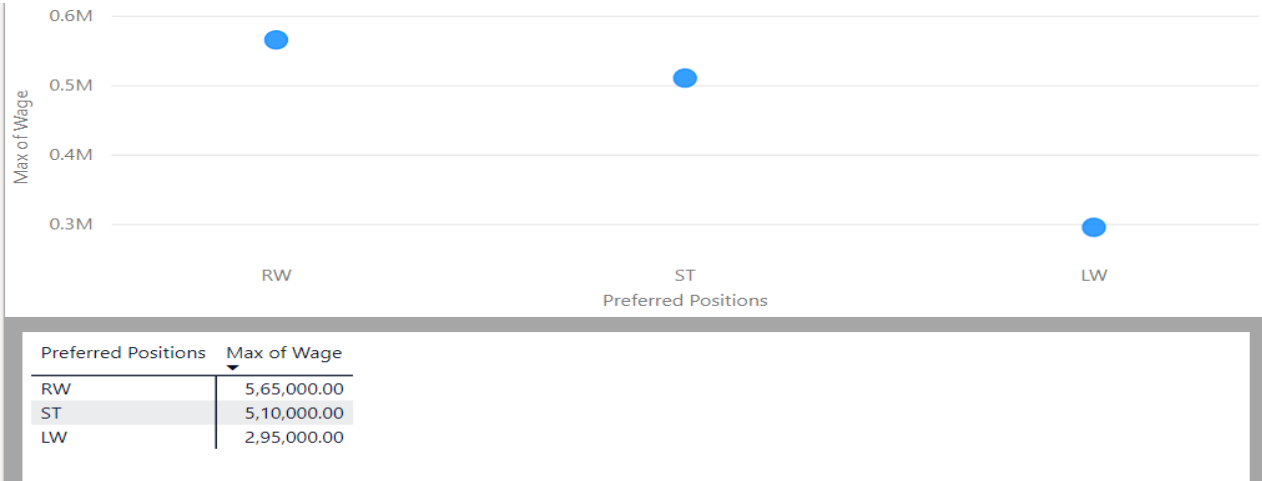
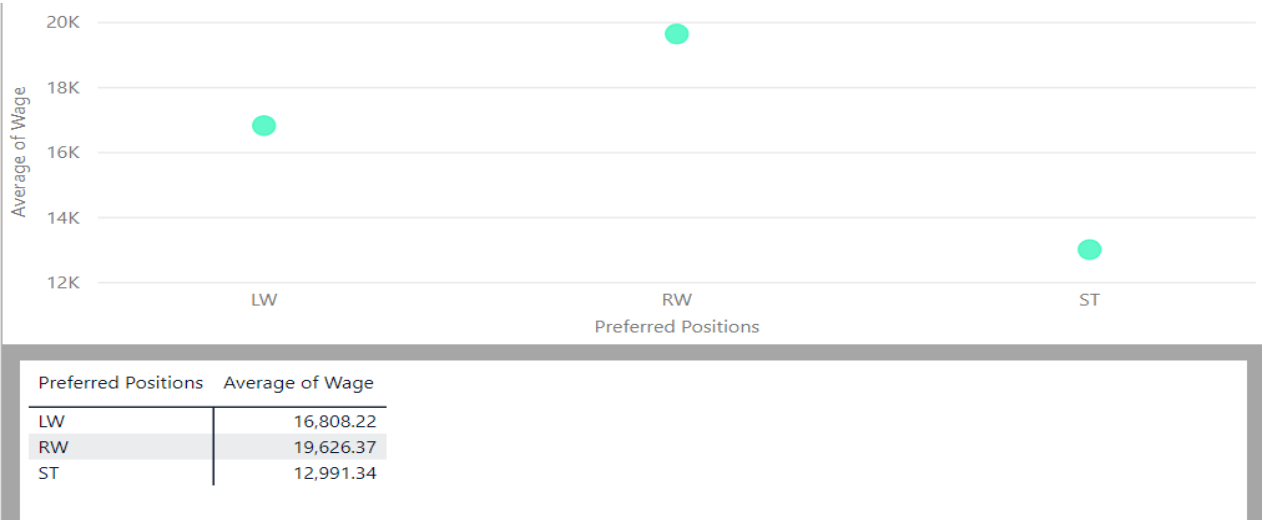
From the above analysis it's pretty obvious that the top 10 countries are England, Germany, Spain, France, Argentina, Brazil, Italy, Colombia, Japan and Netherland with respective totals as 1630, 1140, 1019, 978, 965, 812, 799, 592, 469 and 429.

2). Plot the distribution of overall rating vs. age of players. Interpret what is the age after which a players stops improving?



It is observed that a player stops improving after at an age of 44 and the average of overall starts decreasing from 70.5.

3). Which type of offensive players tends to get paid the most: the striker, the right-winger, or the left-winger? Visualize through a scatter plot



**According to the scatter plot one can observe that RW(right-winger) is being paid the highest sum;**

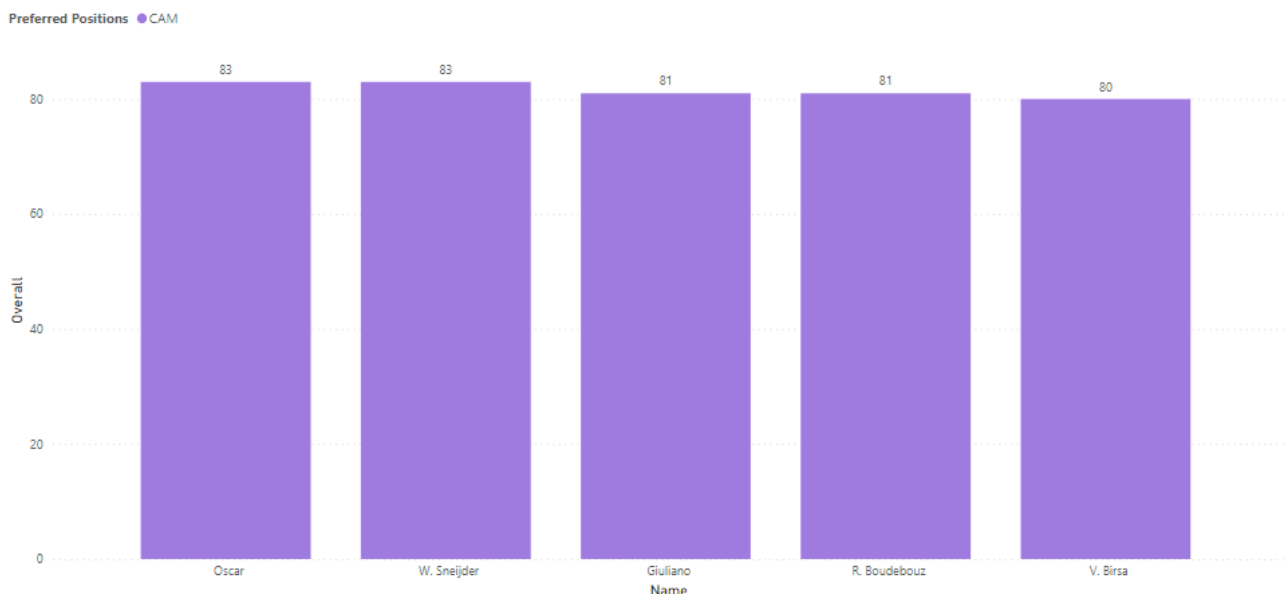
**The right winger's value is 10,50,00,000.00**

**Average Wage is 19,626.3**

**& Maximum Wage is 5.65,000.00**

4). Top 5 players for every preferred position in terms of overall as well as potential points. Who were the best in 2018? Who were destined to be the future superstars in that year?

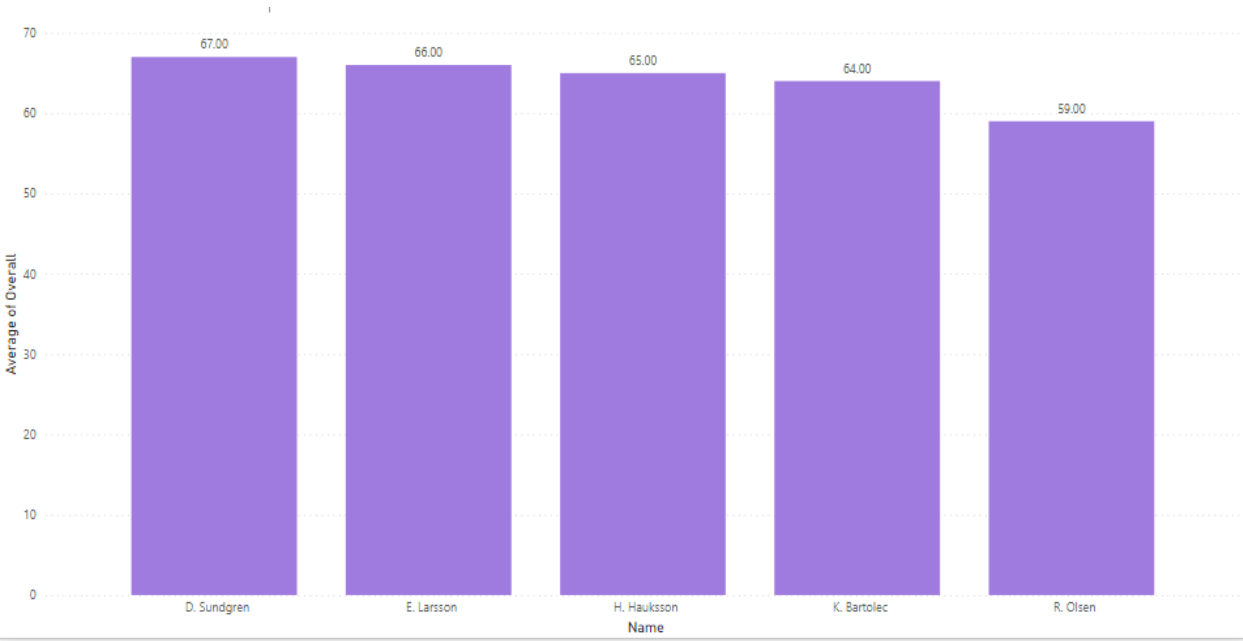
### CAM Overall



Name	Average of Overall	First Preferred Positions
Oscar	83.00	CAM
W. Sneijder	83.00	CAM
Giuliano	81.00	CAM
R. Boudebouz	81.00	CAM
V. Birsa	80.00	CAM

Great Learning Assessment Power Bi  
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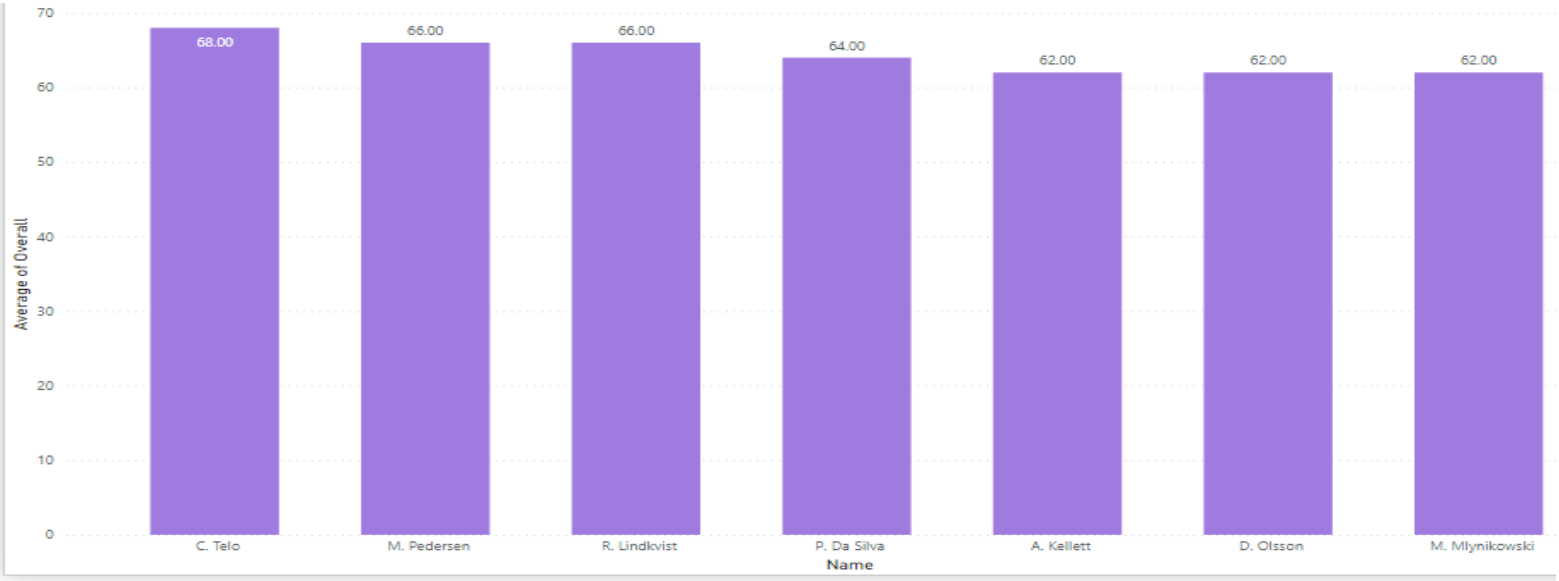
RWB Overall



Name	Average of Overall	First Preferred Positions
D. Sundgren	67.00	RWB
E. Larsson	66.00	RWB
H. Hauksson	65.00	RWB
K. Bartolec	64.00	RWB
R. Olsen	59.00	RWB

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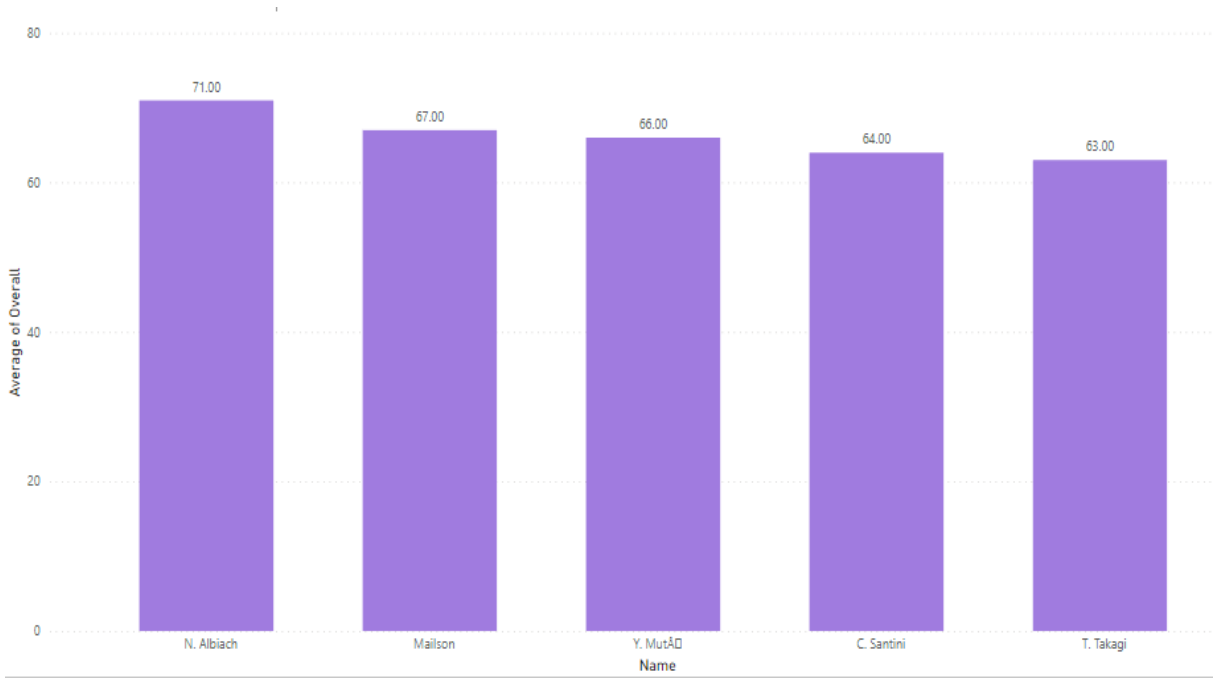
LWB Overall



Name	Average of Overall	First Preferred Positions
C. Telo	68.00	LWB
M. Pedersen	66.00	LWB
R. Lindkvist	66.00	LWB
P. Da Silva	64.00	LWB
A. Kellett	62.00	LWB
D. Olsson	62.00	LWB
M. Mlynikowski	62.00	LWB

CF Overall

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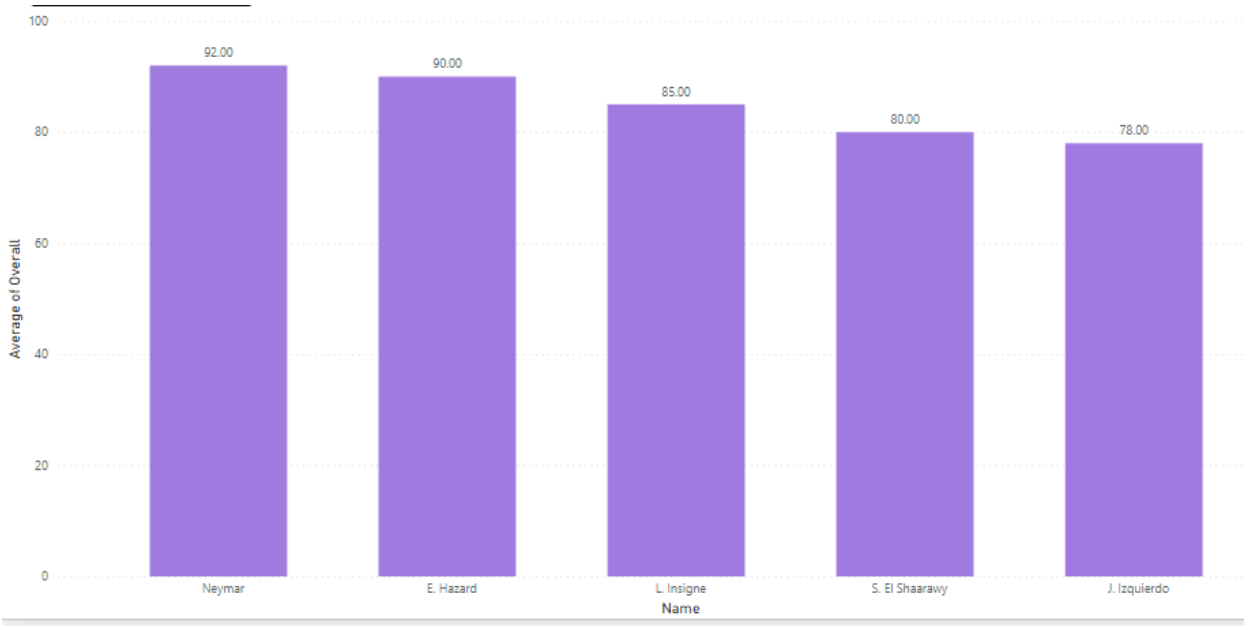


Name	Average of Overall	First Preferred Positions
N. Albiach	71.00	CF
Mailson	67.00	CF
Y. Mutã	66.00	CF
C. Santini	64.00	CF
T. Takagi	63.00	CF



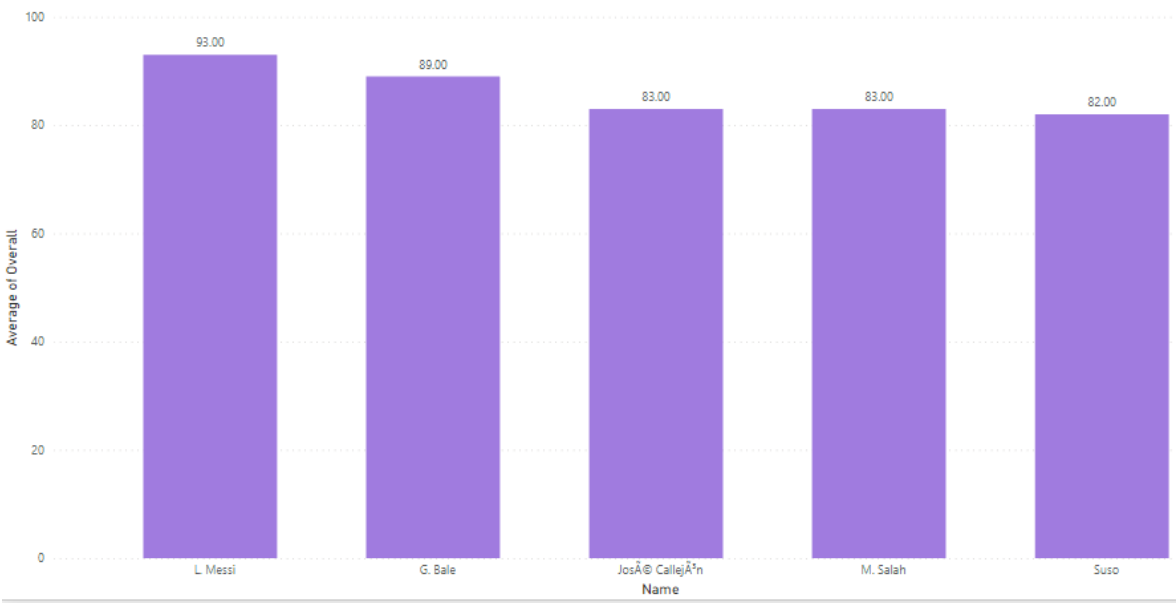
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LW Overall



Name	Average of Overall	First Preferred Positions
Neymar	92.00	LW
E. Hazard	90.00	LW
L. Insigne	85.00	LW
S. El Shaarawy	80.00	LW
J. Izquierdo	78.00	LW

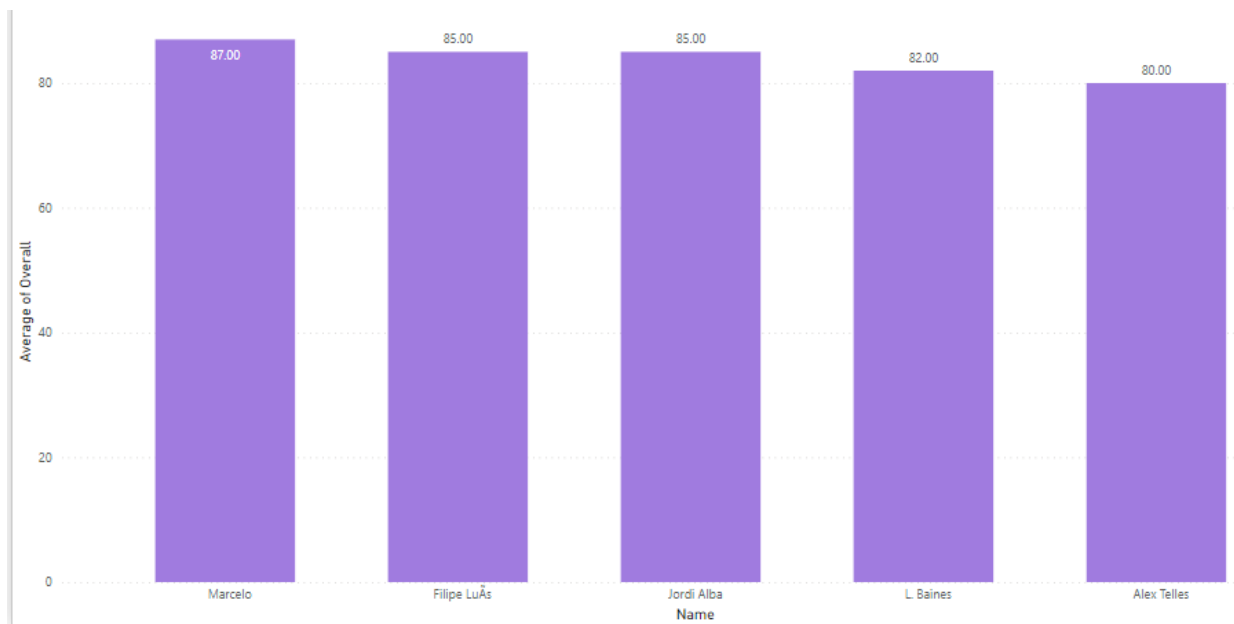
RW Overall



## Great Learning Assessment Power Bi Ishita Sarkar

Name	Average of Overall	First Preferred Positions
L. Messi	93.00	RW
G. Bale	89.00	RW
JosÃ© CallejÃ³n	83.00	RW
M. Salah	83.00	RW
Suso	82.00	RW

### LB Overall

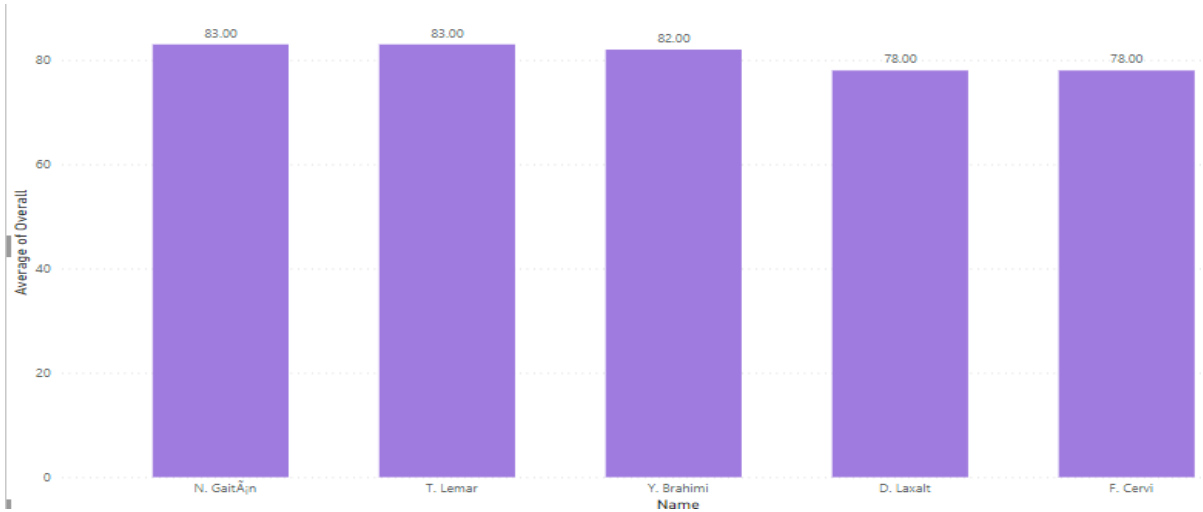


Name	Average of Overall	First Preferred Positions
Marcelo	87.00	LB
Filipe LuÃs	85.00	LB
Jordi Alba	85.00	LB
L. Baines	82.00	LB
Alex Telles	80.00	LB

### LM Overall

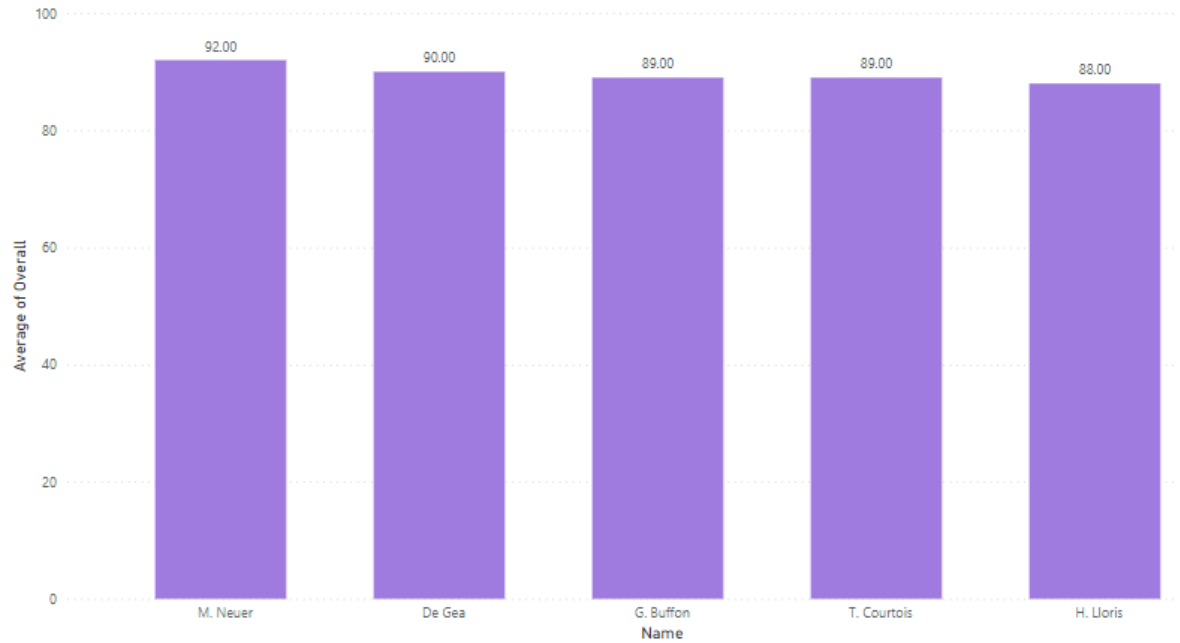
Name	Average of Overall	First Preferred Positions
N. GaitÃ³n	83.00	LM
T. Lemar	83.00	LM
Y. Brahimi	82.00	LM
D. Laxalt	78.00	LM
F. Cervi	78.00	LM

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GK Overall

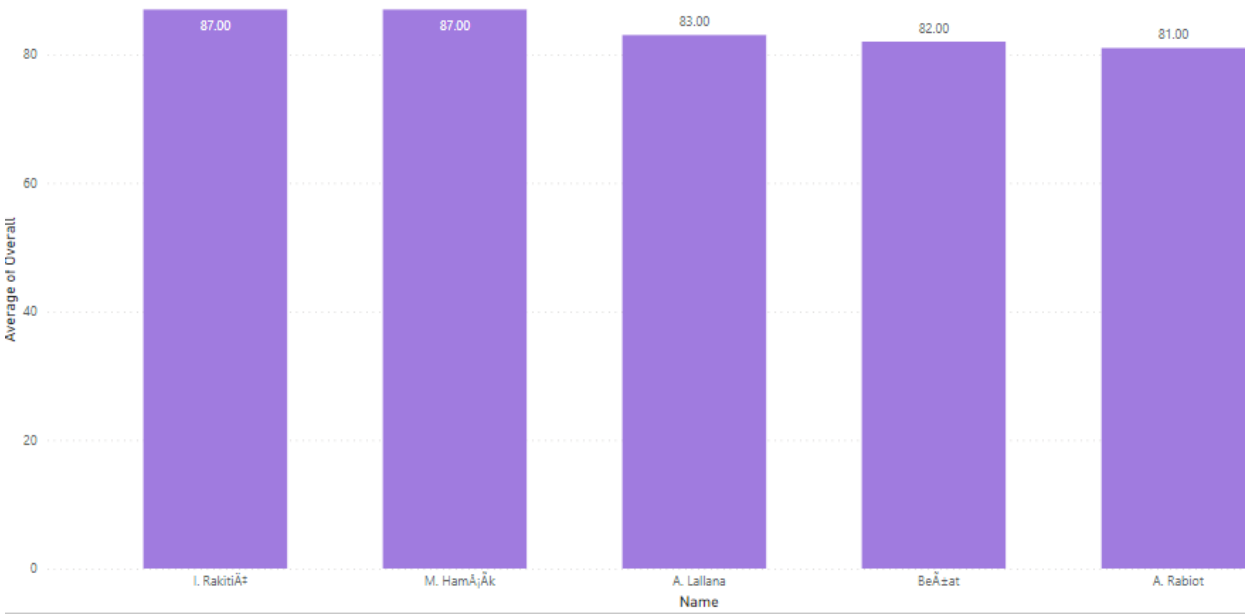
Average of Overall and First Preferred Positions by Name



Name	Average of Overall	First Preferred Positions
M. Neuer	92.00	GK
De Gea	90.00	GK
G. Buffon	89.00	GK
T. Courtois	89.00	GK
H. Lloris	88.00	GK

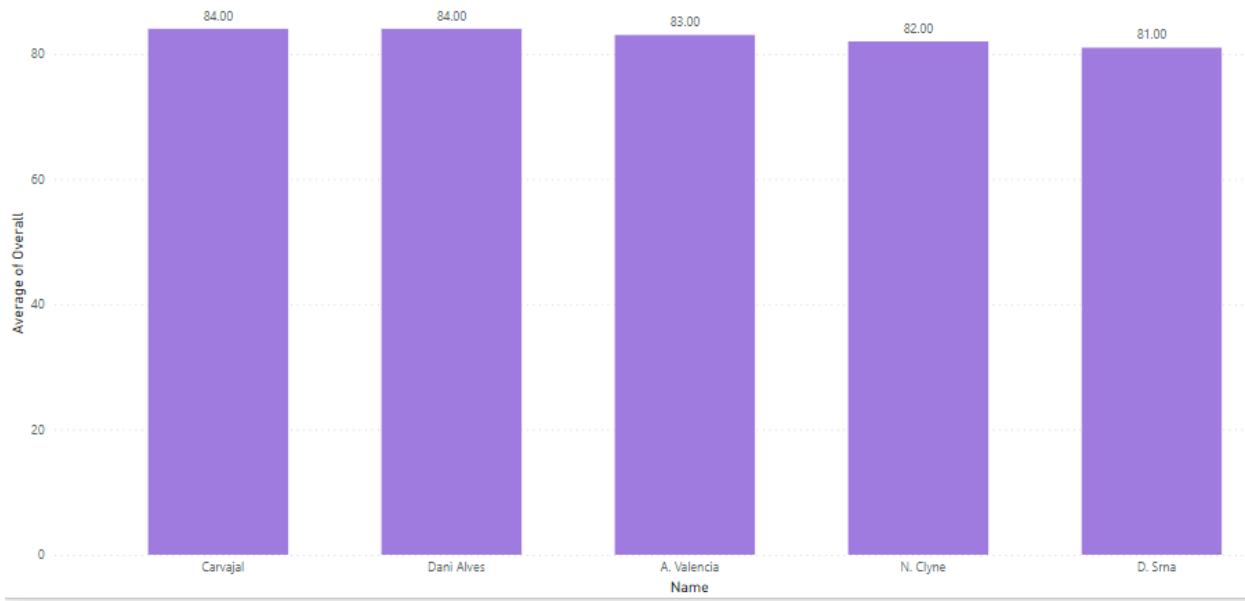
Great Learning Assessment Power Bi  
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CM Overall



Name	Average of Overall	First Preferred Positions
I. Rakitić	87.00	CM
M. Hamrlik	87.00	CM
A. Lallana	83.00	CM
Beñat	82.00	CM
A. Rabiot	81.00	CM

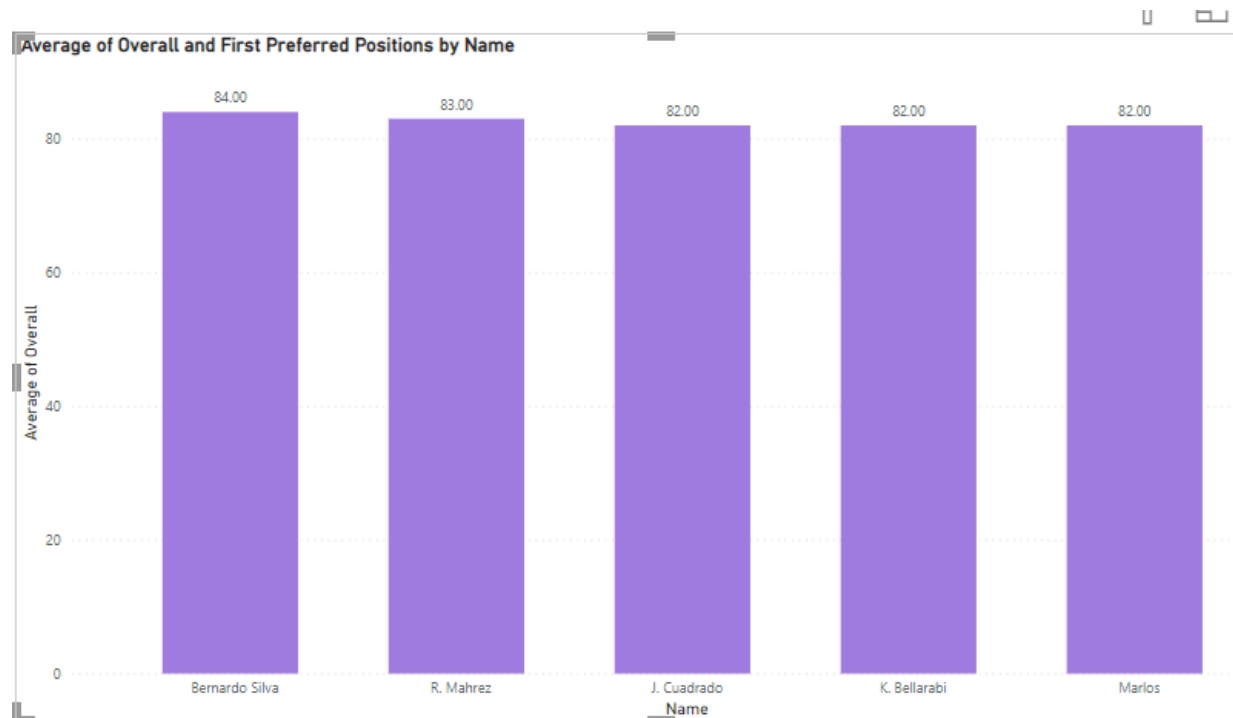
RB Overall



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Name	Average of Overall	First Preferred Positions
Carvajal	84.00	RB
Dani Alves	84.00	RB
A. Valencia	83.00	RB
N. Clyne	82.00	RB
D. Srna	81.00	RB

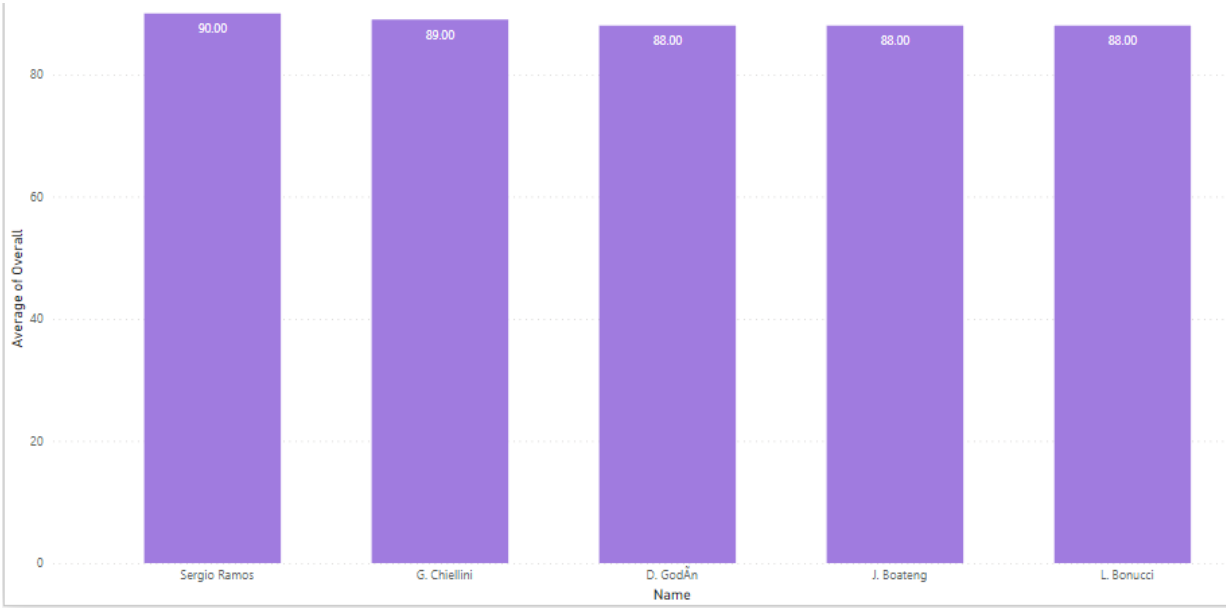
## RM Overall



Name	Average of Overall	First Preferred Positions
Bernardo Silva	84.00	RM
R. Mahrez	83.00	RM
J. Cuadrado	82.00	RM
K. Bellarabi	82.00	RM
Marlos	82.00	RM

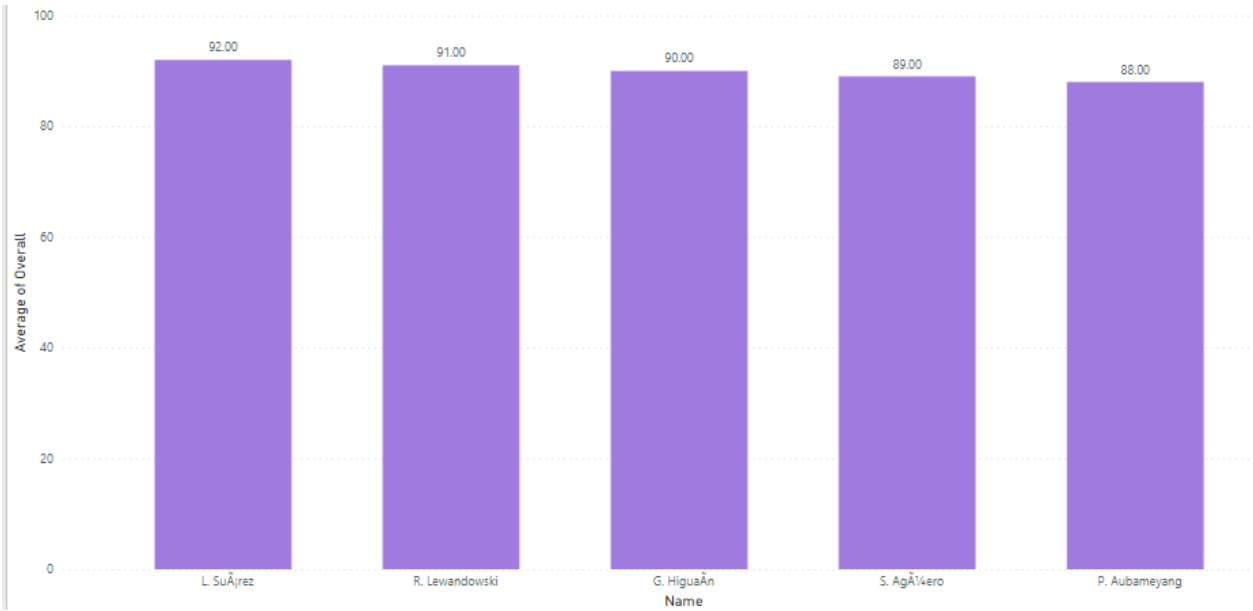
Great Learning Assessment Power Bi  
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CB Overall



Name	Average of Overall	First Preferred Positions
Sergio Ramos	90.00	CB
G. Chiellini	89.00	CB
D. God��n	88.00	CB
J. Boateng	88.00	CB
L. Bonucci	88.00	CB

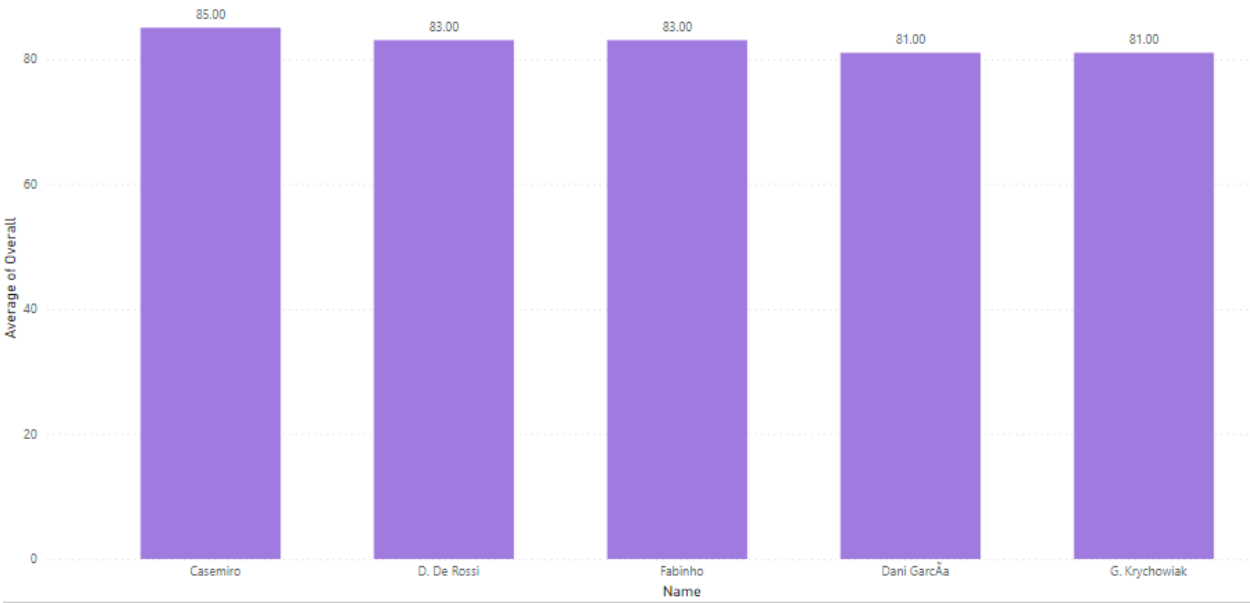
ST Overall



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Ishita Sarkar

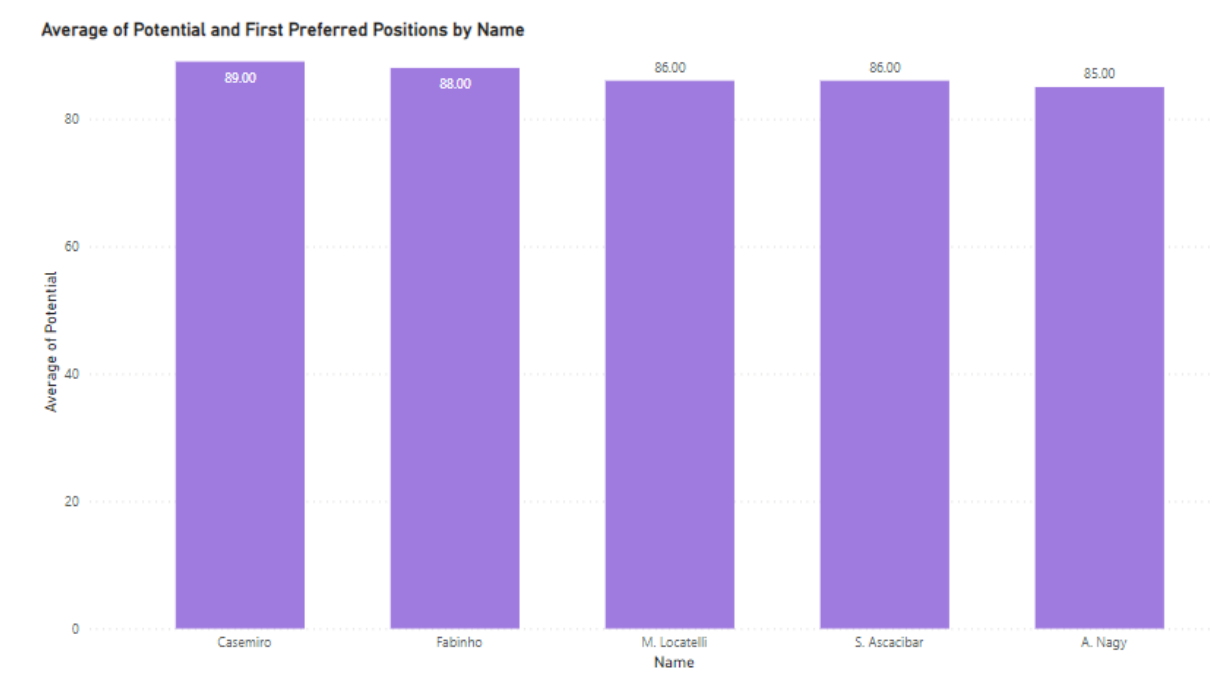
Name	Average of Overall	First Preferred Positions
L. Suárez	92.00	ST
R. Lewandowski	91.00	ST
G. Higuaín	90.00	ST
S. Agüero	89.00	ST
P. Aubameyang	88.00	ST

CDM Overall



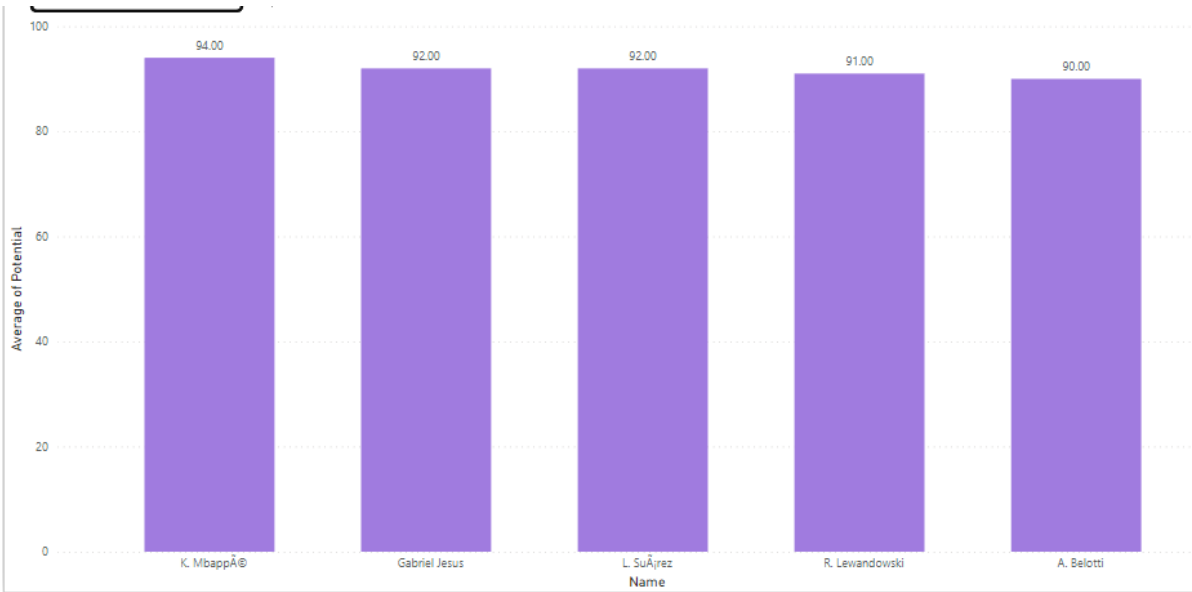
Name	Average of Overall	First Preferred Positions
Casemiro	85.00	CDM
D. De Rossi	83.00	CDM
Fabinho	83.00	CDM
Dani García	81.00	CDM
G. Krychowiak	81.00	CDM

CDM Potential



Name	Average of Potential	First Preferred Positions
Casemiro	89.00	CDM
Fabinho	88.00	CDM
M. Locatelli	86.00	CDM
S. Ascacibar	86.00	CDM
A. Nagy	85.00	CDM

ST Potential

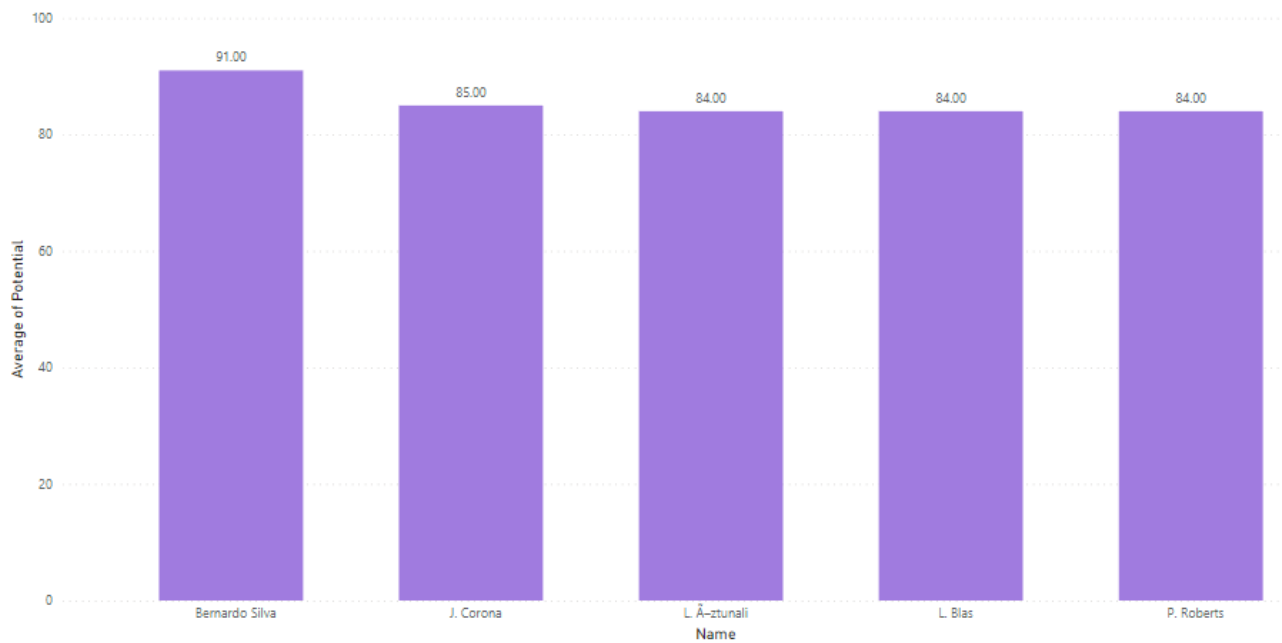




## Great Learning Assessment Power Bi Ishita Sarkar

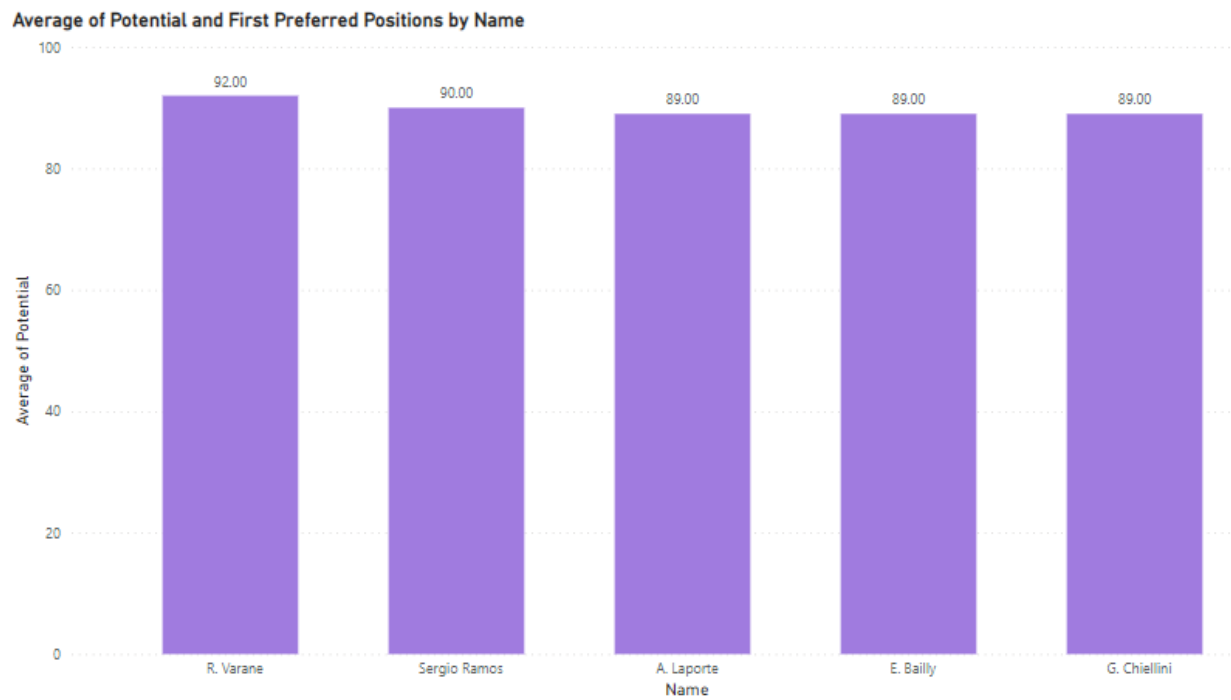
Name	Average of Potential	First Preferred Positions
K. Mbappé	94.00	ST
Gabriel Jesus	92.00	ST
L. Suárez	92.00	ST
R. Lewandowski	91.00	ST
A. Belotti	90.00	ST

### RM Potential



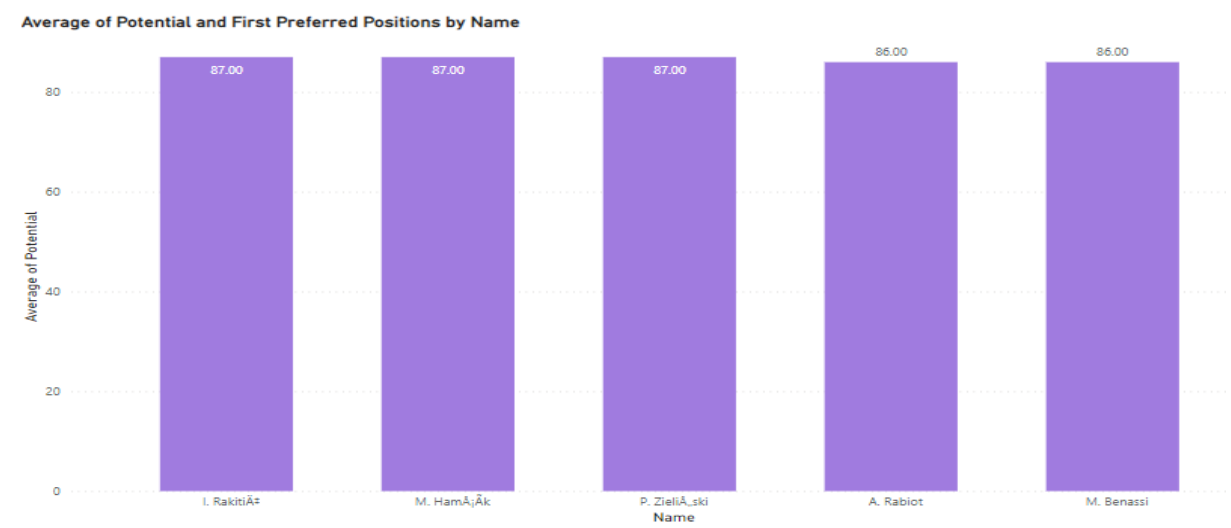
Name	Average of Potential	First Preferred Positions
Bernardo Silva	91.00	RM
J. Corona	85.00	RM
L. Martínez	84.00	RM
L. Blas	84.00	RM
P. Roberts	84.00	RM

CB Potential



Name	Average of Potential	First Preferred Positions
R. Varane	92.00	CB
Sergio Ramos	90.00	CB
A. Laporte	89.00	CB
E. Bailly	89.00	CB
G. Chiellini	89.00	CB

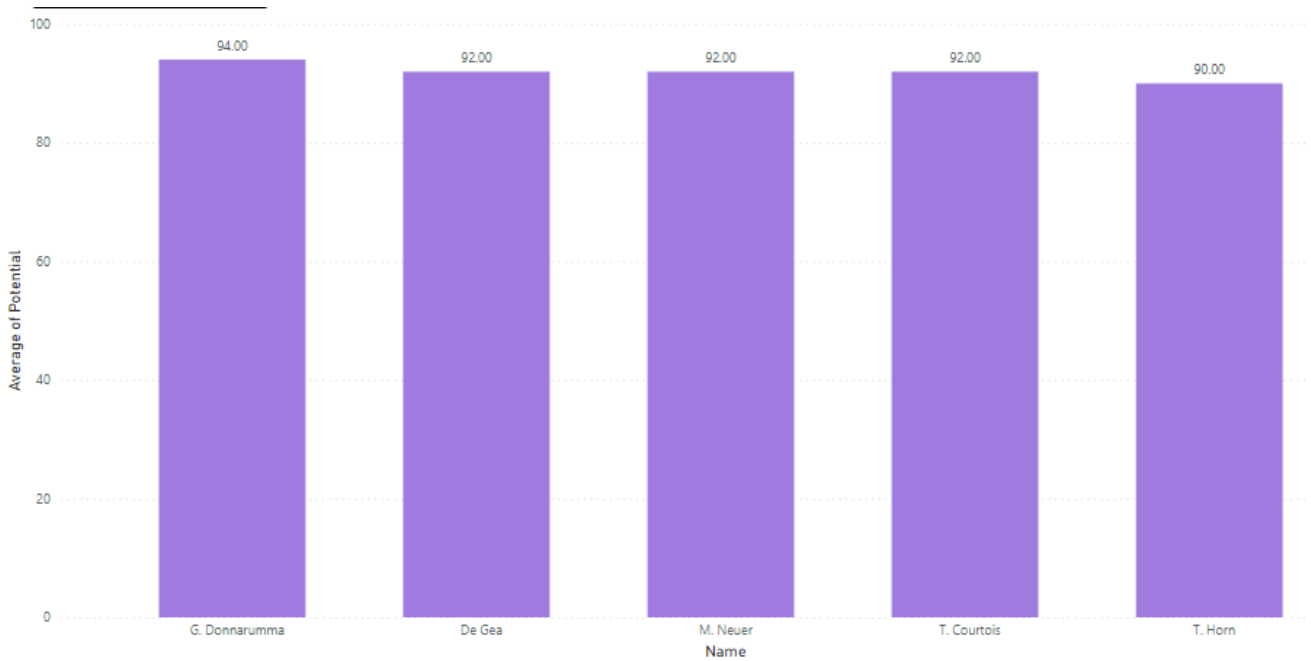
CM Potential



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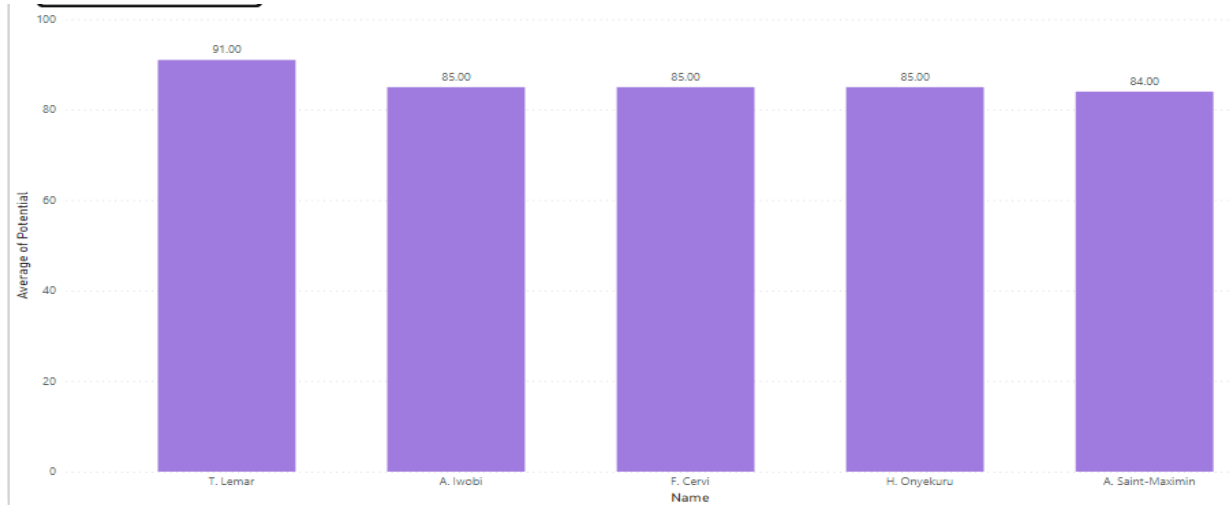
Name	Average of Potential	First Preferred Positions
I. Rakitić	87.00	CM
M. Hamáček	87.00	CM
P. Zieliński	87.00	CM
A. Rabiot	86.00	CM
M. Benassi	86.00	CM

GK Potential



Name	Average of Potential	First Preferred Positions
G. Donnarumma	94.00	GK
De Gea	92.00	GK
M. Neuer	92.00	GK
T. Courtois	92.00	GK
T. Horn	90.00	GK

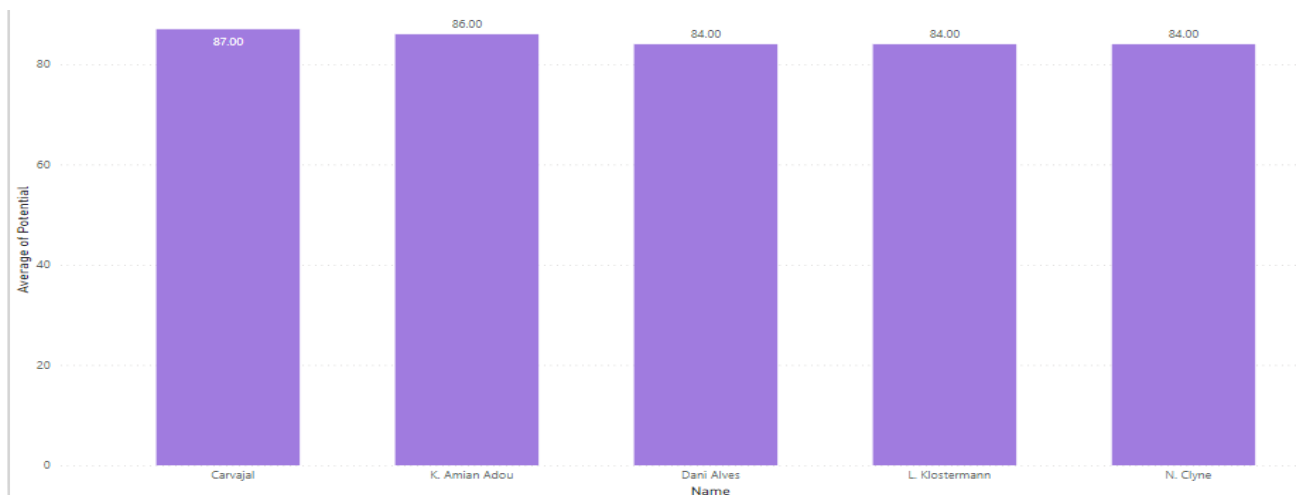
LM Potential



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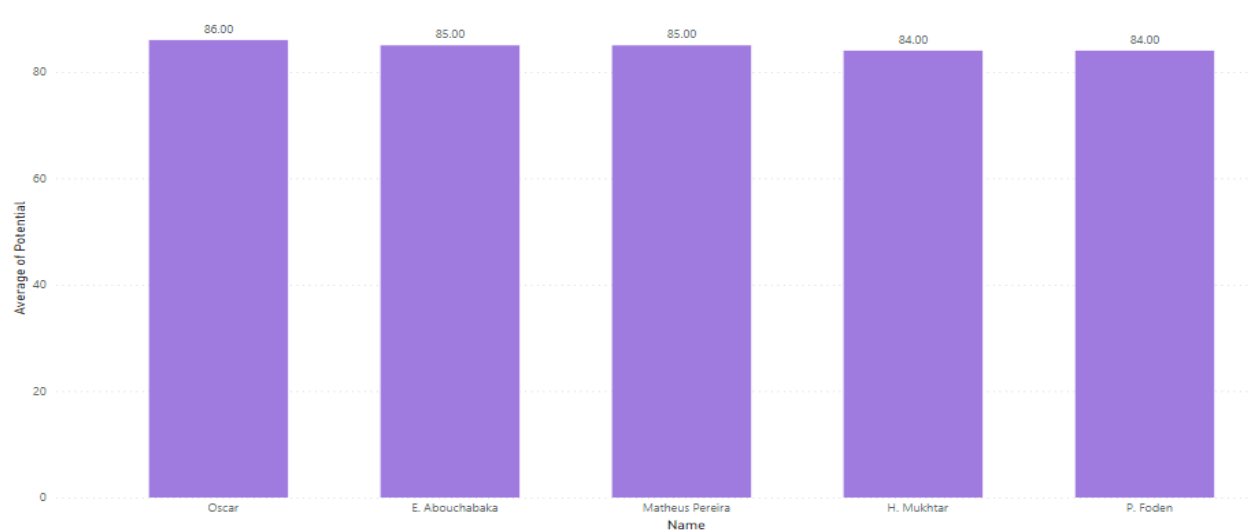
Name	Average of Potential	First Preferred Positions
T. Lemar	91.00	LM
A. Iwobi	85.00	LM
F. Cervi	85.00	LM
H. Onyekuru	85.00	LM
A. Saint-Maximin	84.00	LM

### RB Potential



Name	Average of Potential	First Preferred Positions
Carvajal	87.00	RB
K. Amian Adou	86.00	RB
Dani Alves	84.00	RB
L. Klostermann	84.00	RB
N. Clyne	84.00	RB

### CAM Potential

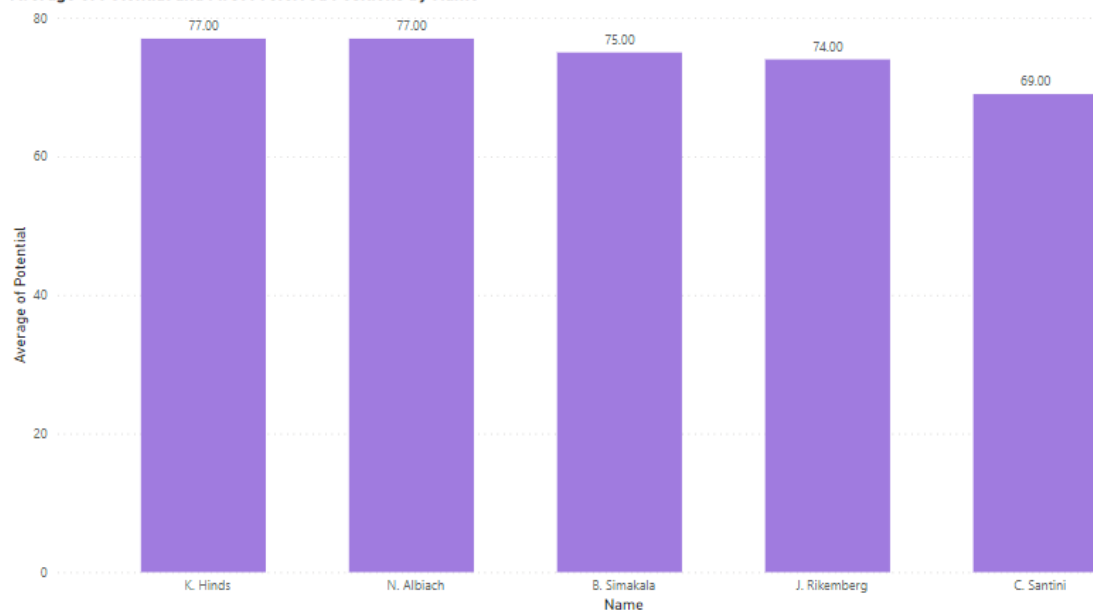


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Name	Average of Potential	First Preferred Positions
Oscar	86.00	CAM
E. Abouchabaka	85.00	CAM
Matheus Pereira	85.00	CAM
H. Mukhtar	84.00	CAM
P. Foden	84.00	CAM

### CF Potential

Average of Potential and First Preferred Positions by Name

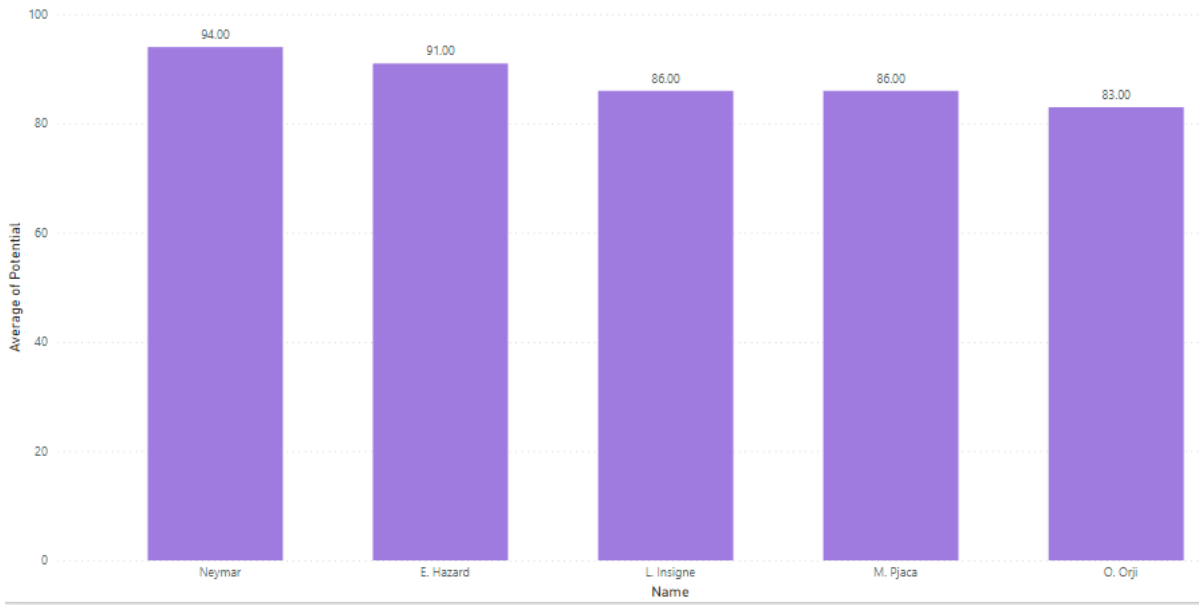


Name	Average of Potential	First Preferred Positions
K. Hinds	77.00	CF
N. Albiach	77.00	CF
B. Simakala	75.00	CF
J. Rikemberg	74.00	CF
C. Santini	69.00	CF

### LW Potential

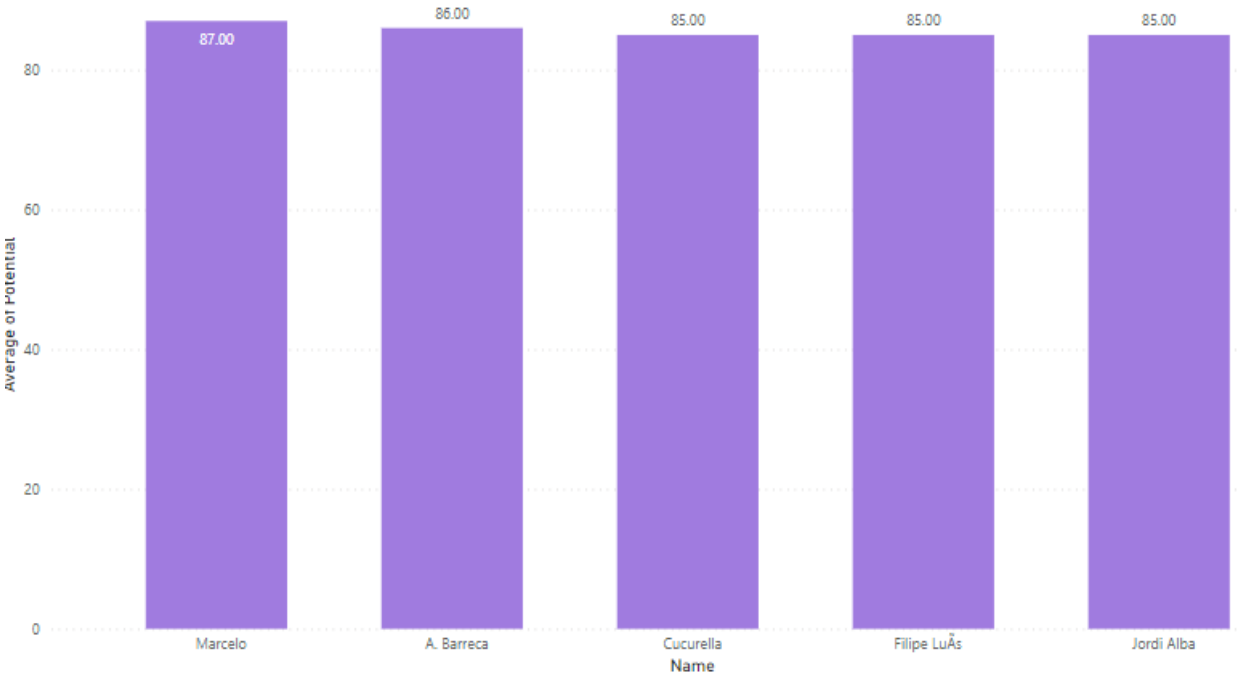
Name	Average of Potential	First Preferred Positions
Neymar	94.00	LW
E. Hazard	91.00	LW
L. Insigne	86.00	LW
M. Pjaca	86.00	LW
O. Orji	83.00	LW

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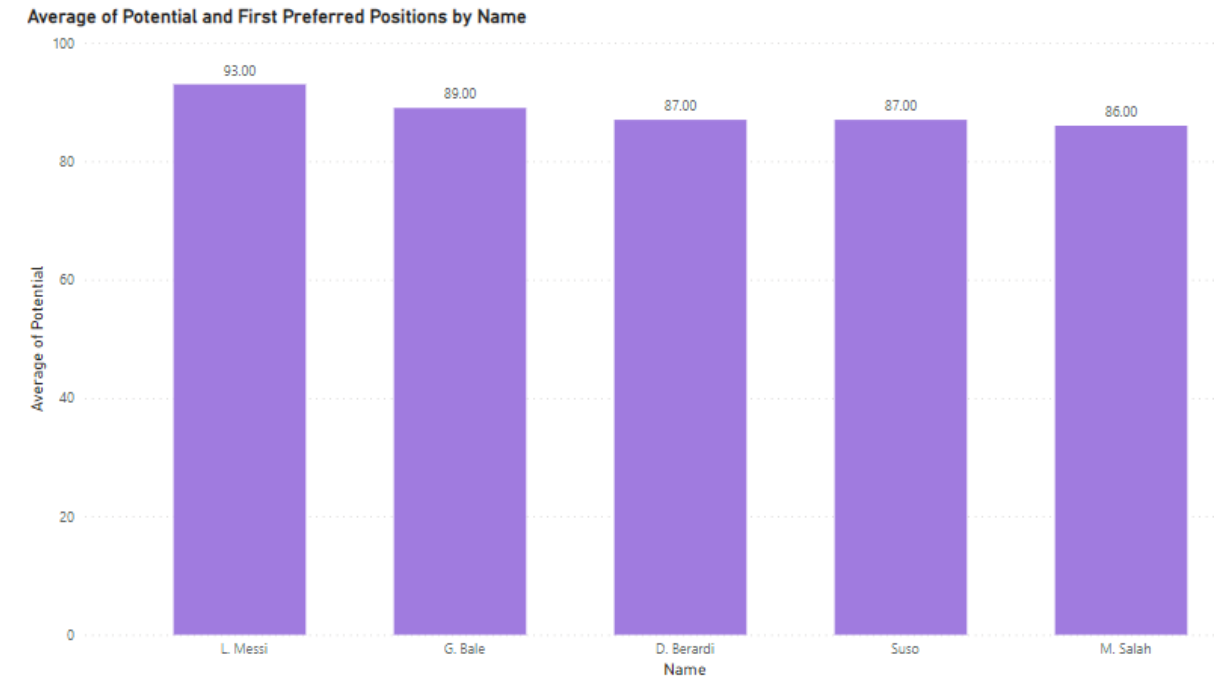
LB Potential

Average of Potential and First Preferred Positions by Name



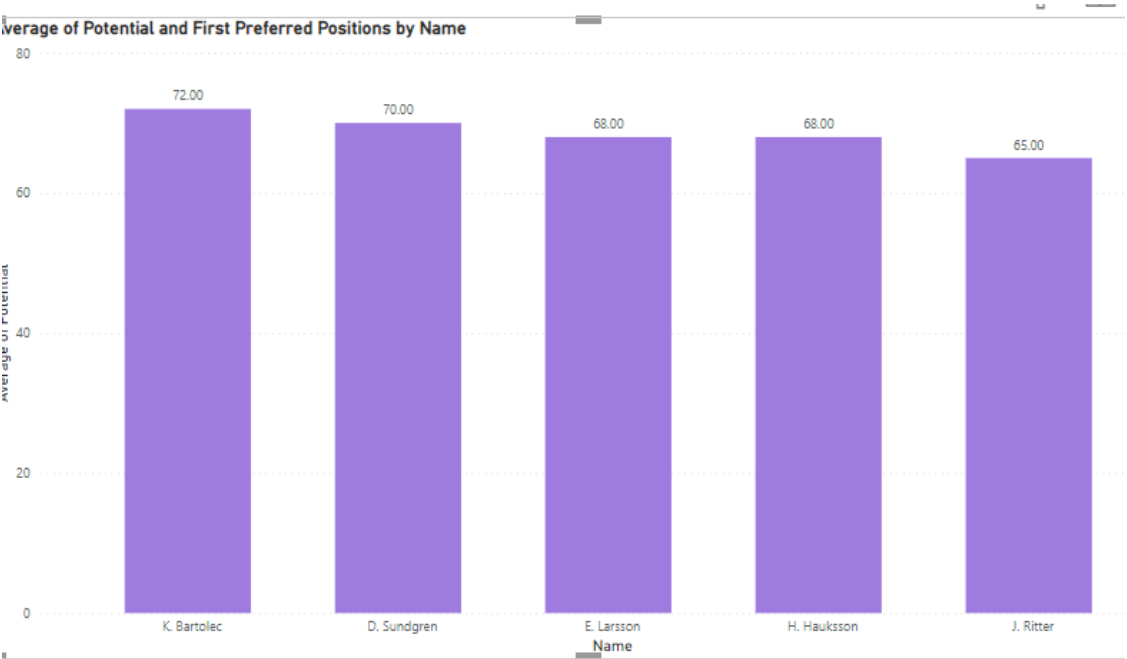
Name	Average of Potential	First Preferred Positions
Marcelo	87.00	LB
A. Barreca	86.00	LB
Cucurella	85.00	LB
Filipe LuÃs	85.00	LB
Jordi Alba	85.00	LB

RW Potential



Name	Average of Potential	First Preferred Positions
L. Messi	93.00	RW
G. Bale	89.00	RW
D. Berardi	87.00	RW
Suso	87.00	RW
M. Salah	86.00	RW

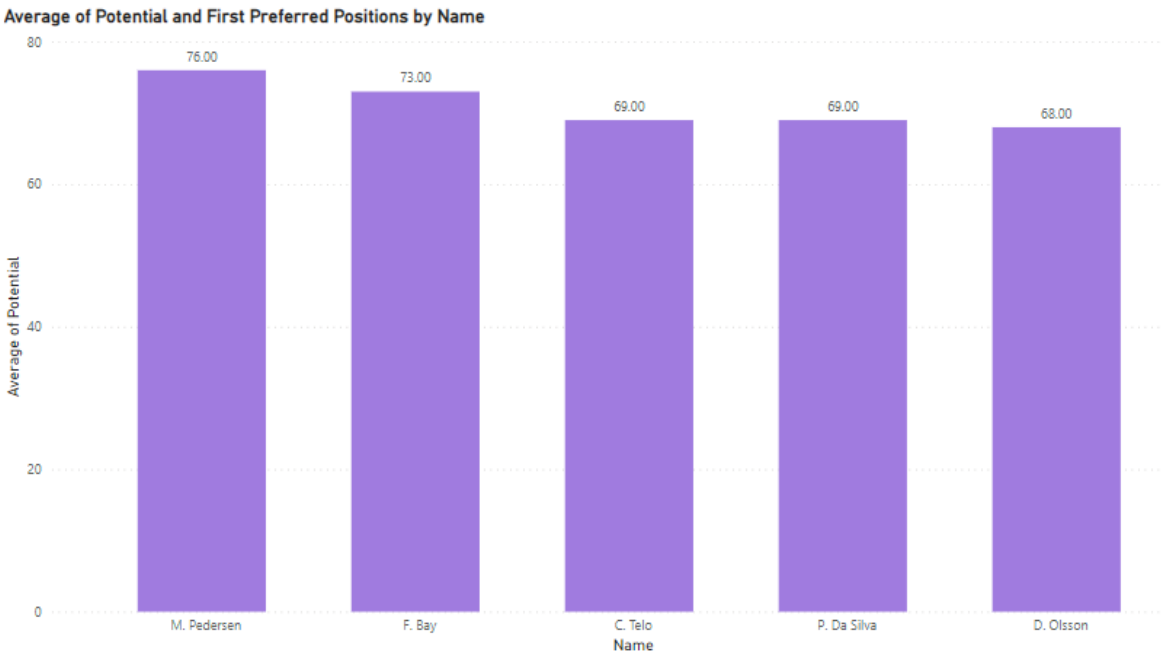
RWB Potential



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Name	Average of Potential	First Preferred Positions
K. Bartolec	72.00	RWB
D. Sundgren	70.00	RWB
E. Larsson	68.00	RWB
H. Hauksson	68.00	RWB
J. Ritter	65.00	RWB

LWB Potential



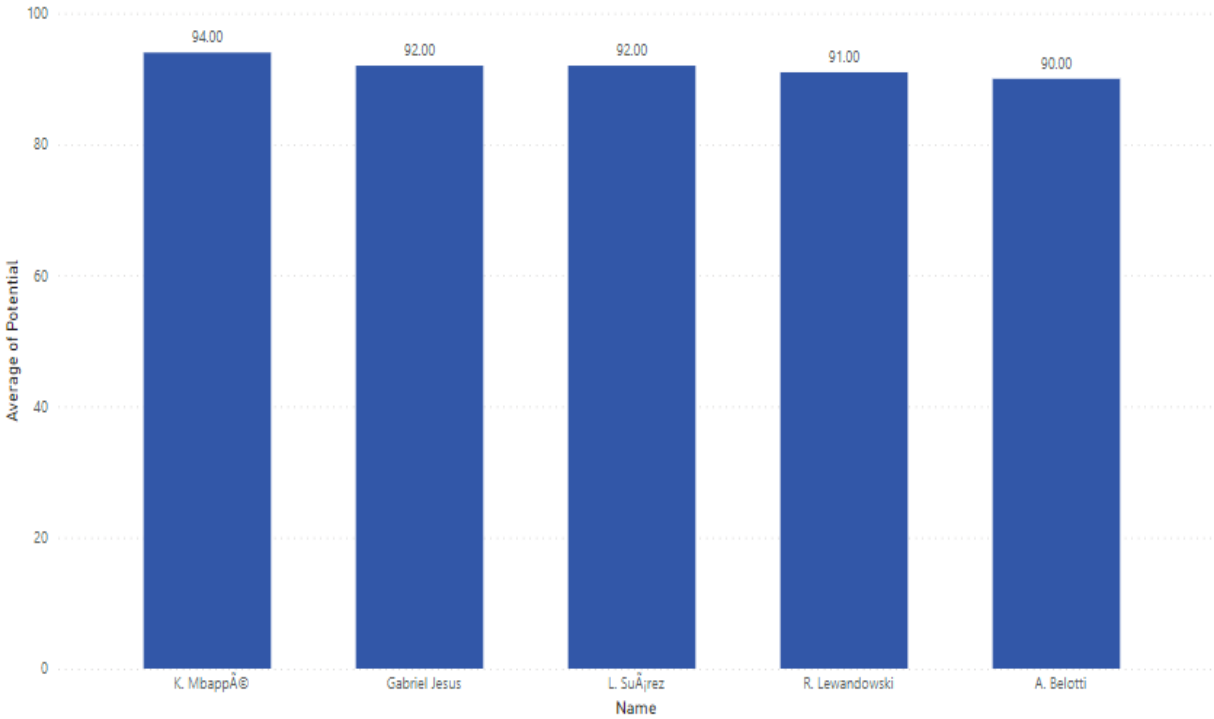
Name	Average of Potential	First Preferred Positions
M. Pedersen	76.00	LWB
F. Bay	73.00	LWB
C. Telo	69.00	LWB
P. Da Silva	69.00	LWB
D. Olsson	68.00	LWB



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ST Overall

Average of Potential and First Preferred Positions by Name



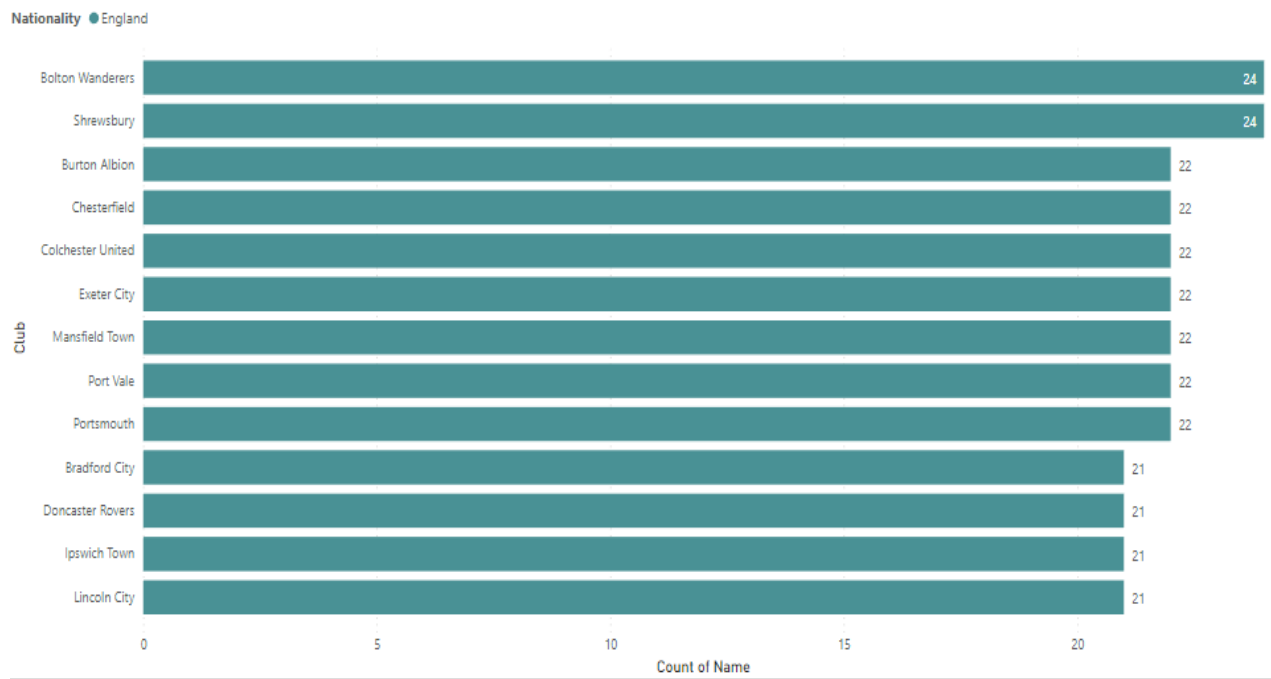
Name	Average of Potential	First Preferred Positions
K. Mbappé	94.00	ST
Gabriel Jesus	92.00	ST
L. Suárez	92.00	ST
R. Lewandowski	91.00	ST
A. Belotti	90.00	ST

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<b>Preferred Position</b>	<b>Best Players of 2018</b>	<b>Player destined to be the future superstar</b>
CAM	Oscar	Oscar
CB	Sergio Ramos	R.Varane
CDM	Casemiro	Casemiro
CF	N.Albiach	K.Hinds
CM	I. Rakitić	I. Rakitić
GK	M.Neuer	G.Donnarumma
LB	Marcelo	Marcelo
LM	N.Gaitán	T.Lemar
LW	Neymer	Neymer
LWB	C.Telo	M.Pedersen
RB	Carvajal	Carvajal
RM	Bernando Silva	Bernando Silva
RW	L.Messi	L.Messi
RWB	D.Sundgren	K.Bartolec
KKST	L.Suariz	K.Mbappa

5). Which club(s) have the maximum share of players from England? Which club(s) have the maximum share of players from Spain? Which club(s) have the maximum share of players from Germany?

Clubs with maximum share of player England



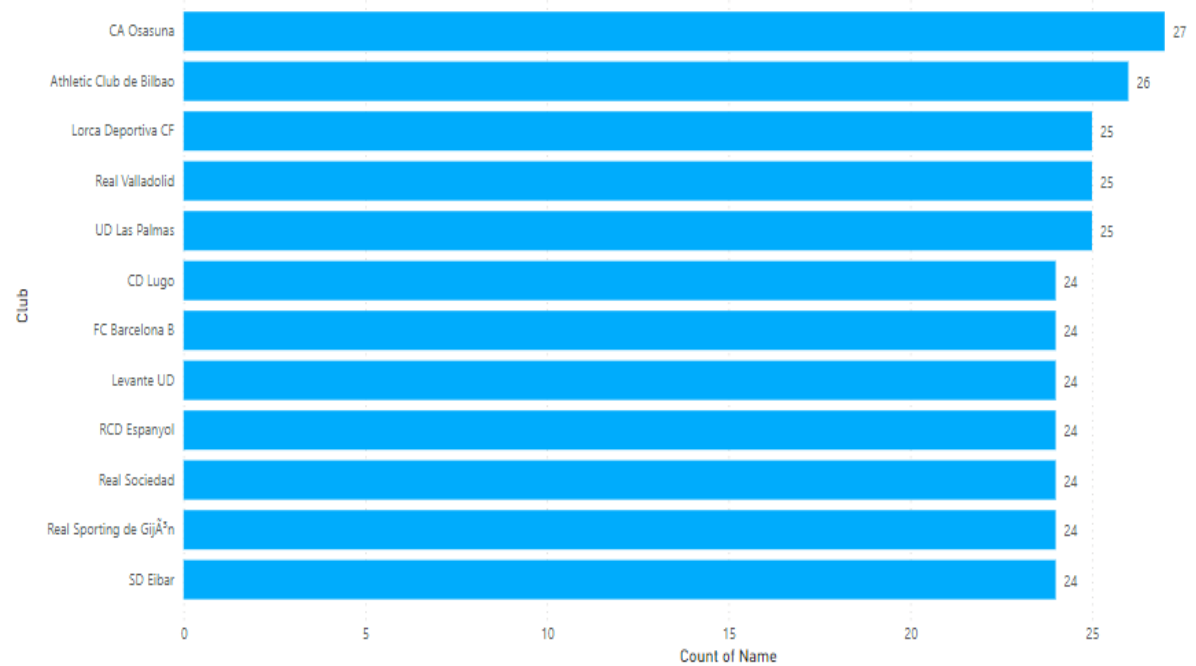
Club	England
Bolton Wanderers	24
Shrewsbury	24
Burton Albion	22
Chesterfield	22
Colchester United	22
Exeter City	22
Mansfield Town	22
Port Vale	22
Portsmouth	22
Bradford City	21
Doncaster Rovers	21
Ipswich Town	21
Lincoln City	21

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## Clubs with maximum share of player Spain

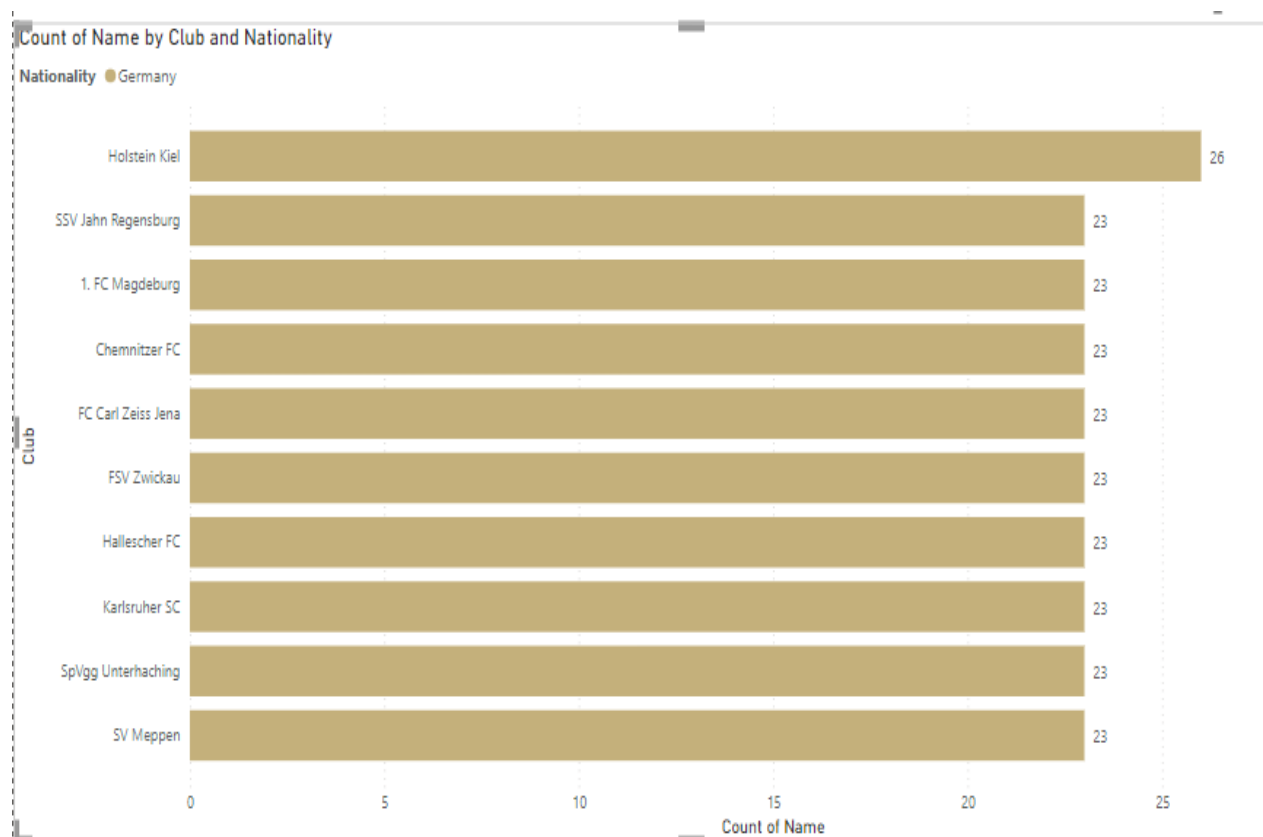
Count of Name by Club and Nationality

Nationality ● Spain



Club	Spain
CA Osasuna	27
Athletic Club de Bilbao	26
Lorca Deportiva CF	25
Real Valladolid	25
UD Las Palmas	25
CD Lugo	24
FC Barcelona B	24
Levante UD	24
RCD Espanyol	24
Real Sociedad	24
Real Sporting de Gijón	24
SD Eibar	24

## Clubs with maximum share of player Germany



Club	Germany
Holstein Kiel	26
SSV Jahn Regensburg	23
1. FC Magdeburg	23
Chemnitzer FC	23
FC Carl Zeiss Jena	23
FSV Zwickau	23
Hallescher FC	23
Karlsruher SC	23
SpVgg Unterhaching	23
SV Meppen	23

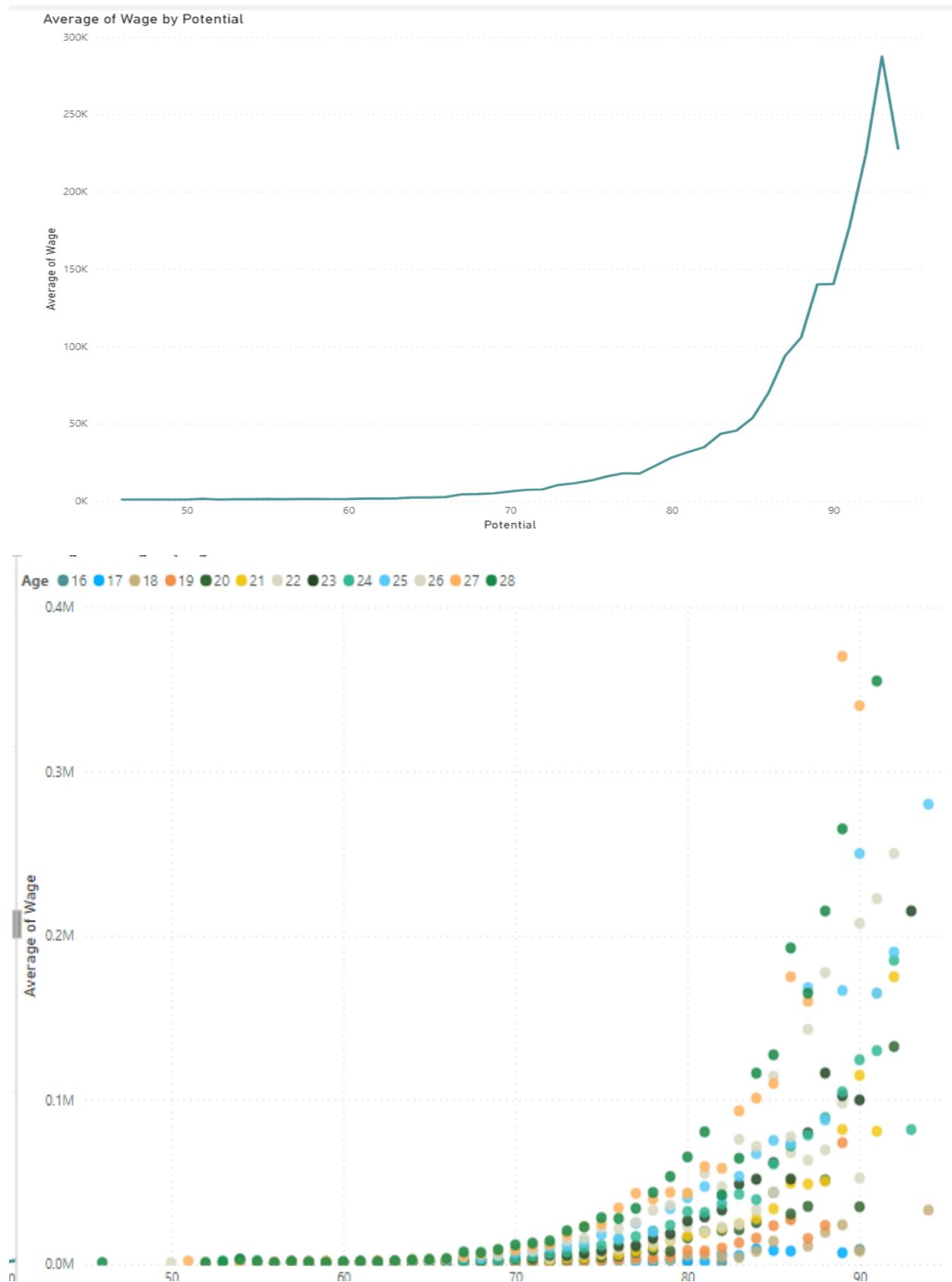
**Following clubs have the maximum shares of players from respective countries:**

**England - Bolton Wanderers and Shrewsbury**

**Spain - CA Osasuna**

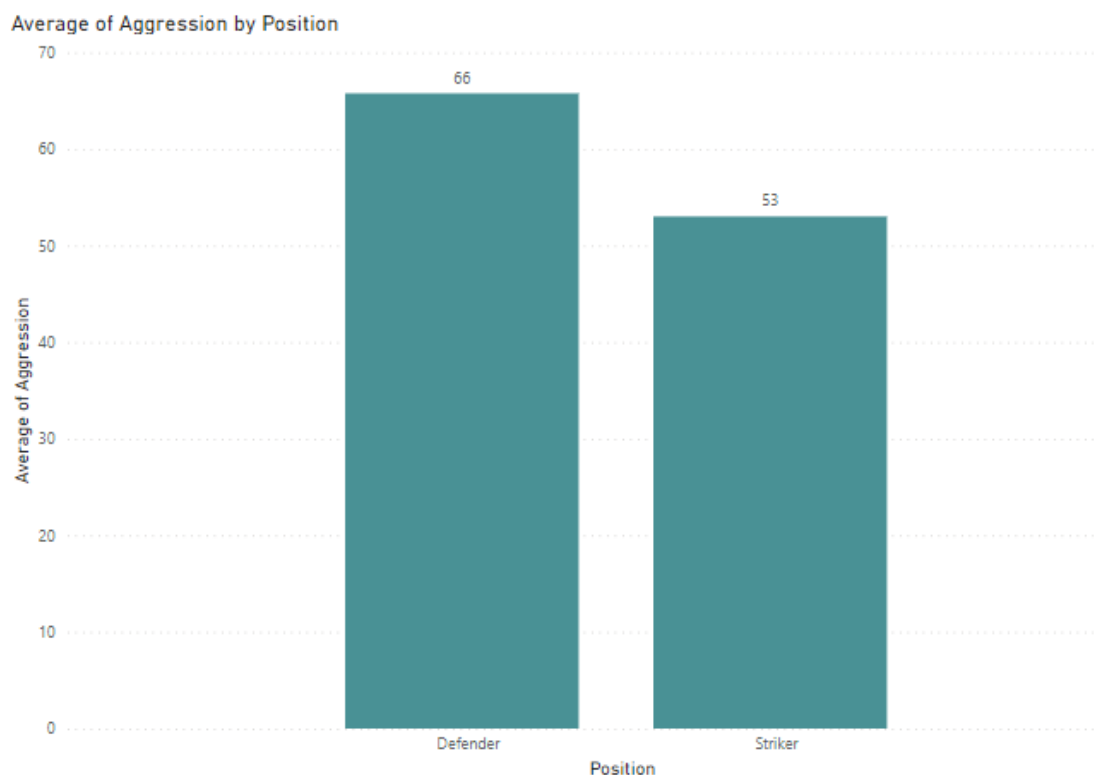
**Germany - Holstein Kiel**

6). Are the wages of a player influenced by the potential of a player? Check it out for players with age Between 16 to 28?



The general pattern reveals that more the potential a player has, he is likely to have higher the wage. We have used a scatter plot and a line plot above to come to the conclusion. The presence of outliers or exceptions has caused the Average Wage Vs Potential line graph to have a sudden dip towards the end, otherwise, an exponentially increasing trend can be observed.

7). Do Strikers score higher on "Aggression" than defenders do? Group both the set of players (from an overall score of 80 to 85) and compare their average aggression levels. Which particular position has the highest aggression as a given (players with an overall score of 80 to 90)?



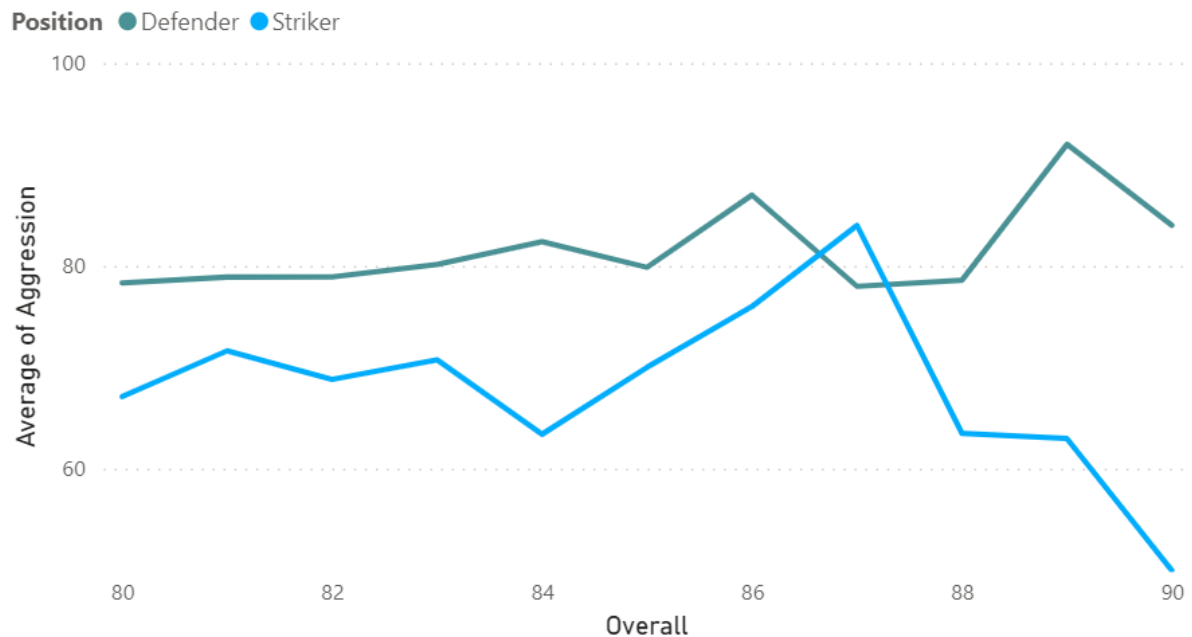
Position	Average of Aggression
Defender	65.78
Striker	53.03

Positions	Average of Aggression
CDM	68.38
CB	66.95
RB	64.66
LB	63.43
Other	59.50
CM	59.28
LWB	59.27
RWB	57.75
ST	53.03
CAM	47.19
RM	46.93
LM	46.19
RW	42.84
LW	42.60
CF	38.29
GK	26.72

**It can be observed from the bar graph that the average aggression score of Strikers (ST) is much lower than that of the Defenders (CB, LB, RB, RWB, LWB) for the players with an overall score in the 80-90 bracket. Players with an overall of 80-90 and in the CDM position rank the highest in terms of average aggression score.**



Average of Aggression by Overall and Position



Overall	Defender	Striker
80	78.33	67.11
81	78.90	71.64
82	78.92	68.82
83	80.13	70.75
84	82.40	63.40
85	79.86	70.00
86	87.00	76.00
87	78.00	84.00
88	78.60	63.50
89	92.00	63.00
90	84.00	50.00

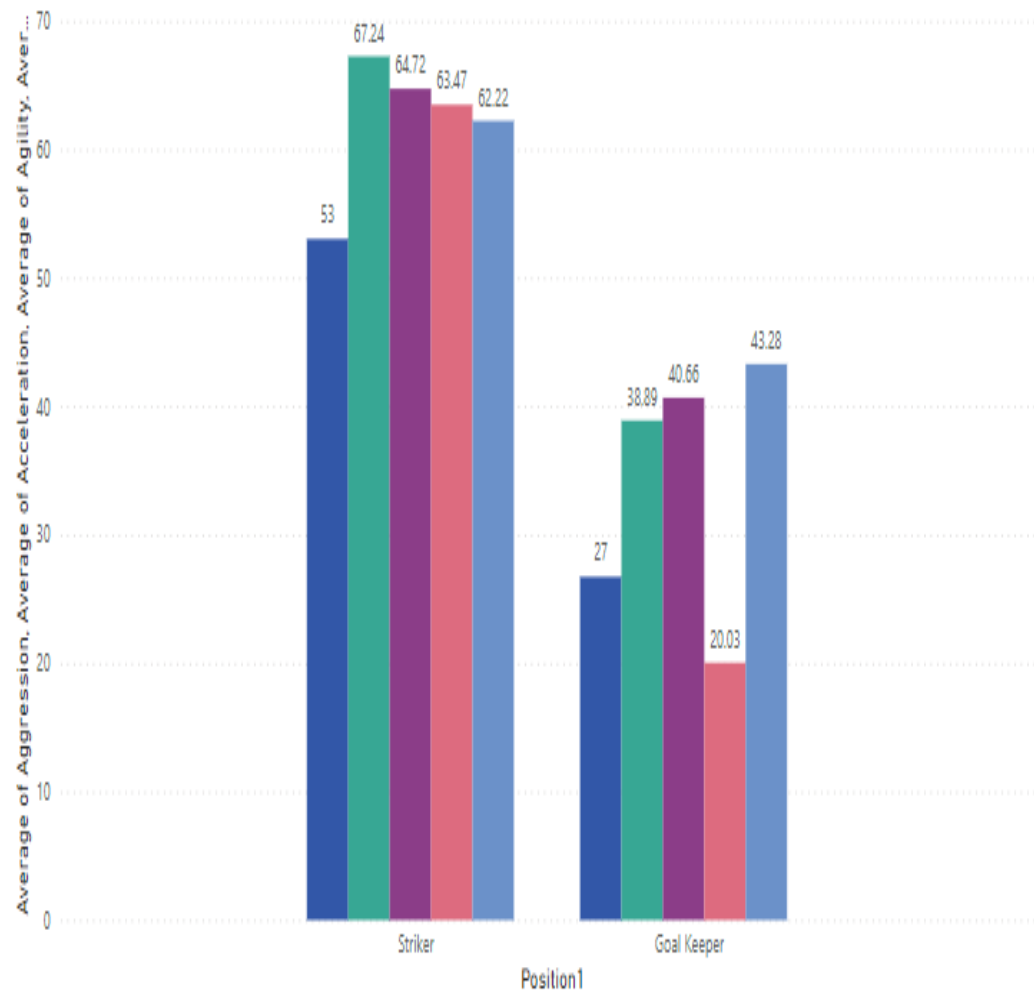
From the above graph we can see that the defenders (LB, RB, CB, RWB, LWB) score higher than strikers up to an overall of 87.0 but later on the striker 87 scored higher on aggression but later the defender scored higher after overall crossed 89.0.

8). How based on the positional data, players are profiled for different roles/classes. Plot Aggression, Acceleration, Agility, Balance and Ball Control for strikers and Goal Keepers in a single line/Bar plot to understand the positional difference

## Great Learning Assessment Power Bi Ishita Sarkar

Average of Aggression, Average of Acceleration, Average of Agility, Average of Ball control and Average of Balance by Position1

● Average of Aggression ● Average of Acceleration ● Average of Agility ● Average of Ball control ● Average of Balance

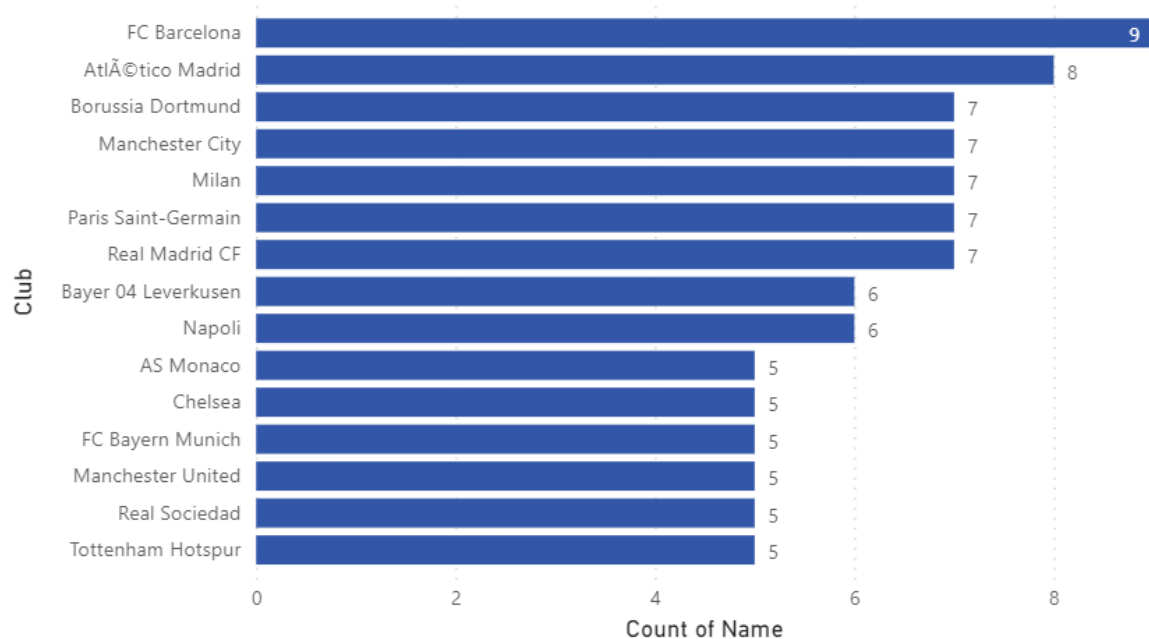


Position1	Average of Aggression	Average of Acceleration	Average of Agility	Average of Ball control	Average of Balance
Striker	53.03	67.24	64.72	63.47	62.22
Goal Keeper	26.72	38.89	40.66	20.03	43.28

**It can be inferred with the help of the visualization above that the average score of Goalkeepers in terms of Aggression, Acceleration, Agility, Balance and Ball Control is lesser than that of the Strikers. The most contrasting difference can be observed for the average score of ball control for Strikers and Goalkeepers.**

9).Which clubs consists of the best future players? Consider only the players with Overall = 86, plot a graph to show which are the top 10 clubs with most number of best future players.

Count of Name by Club



Club	Count of Name
Atlético Madrid	8
Borussia Dortmund	7
Manchester City	7
Milan	7
Paris Saint-Germain	7
Real Madrid CF	7
Bayer 04 Leverkusen	6
Napoli	6
AS Monaco	5
Chelsea	5
FC Bayern Munich	5
Manchester United	5
Real Sociedad	5
Tottenham Hotspur	5

**We can see from the graph and the table that FC Barcelona has the maximum number of best future players followed by Atlético Madrid. Borussia Dortmund, Manchester City, Milan, Paris Saint-German and Real Madrid CF all lie in the third position with an equal number of best future players.**