Data Analysis and Predictions

INDIAN PREMIER LEAGUE

2021-2023

PROBLEM STATEMENT

1. "Sports Basics" is a sports blog company that entered space recently. They wanted to get more traffic to their website by releasing a special edition magazine on IPL 2024.

2. This magazine aims to provide interesting insights and facts for fans, analysts and teams based on the last 3 years' data.

3. The chief editor Tony Sharma oversees this publication, and he believes in data analytics. He reached out to Peter Pandey, a journalist in his team who is a data savvy cricket enthusiast.

PRIMARY AND SECONDARY ANALYSIS

1. Top 10 batsmen based on past 3 years total runs scored.
2. Top 10 batsmen based on past 3 years batting average. (min 60 balls faced in each season)
3. Top 10 batsmen based on past 3 years strike rate (min 60 balls faced in each season)
4. Top 10 bowlers based on past 3 years total wickets taken.
5. Top 10 bowlers based on past 3 years bowling average. (min 60 balls bowled in each season)
6. Top 10 bowlers based on past 3 years economy rate. (min 60 balls bowled in each season)
7. Top 5 batsmen based on past 3 years boundary % (fours and sixes).
8. Top 5 bowlers based on past 3 years dot ball %.
9. Top 4 teams based on past 3 years winning %.
10. Top 2 teams with the highest number of wins achieved by chasing targets over the past 3 years.

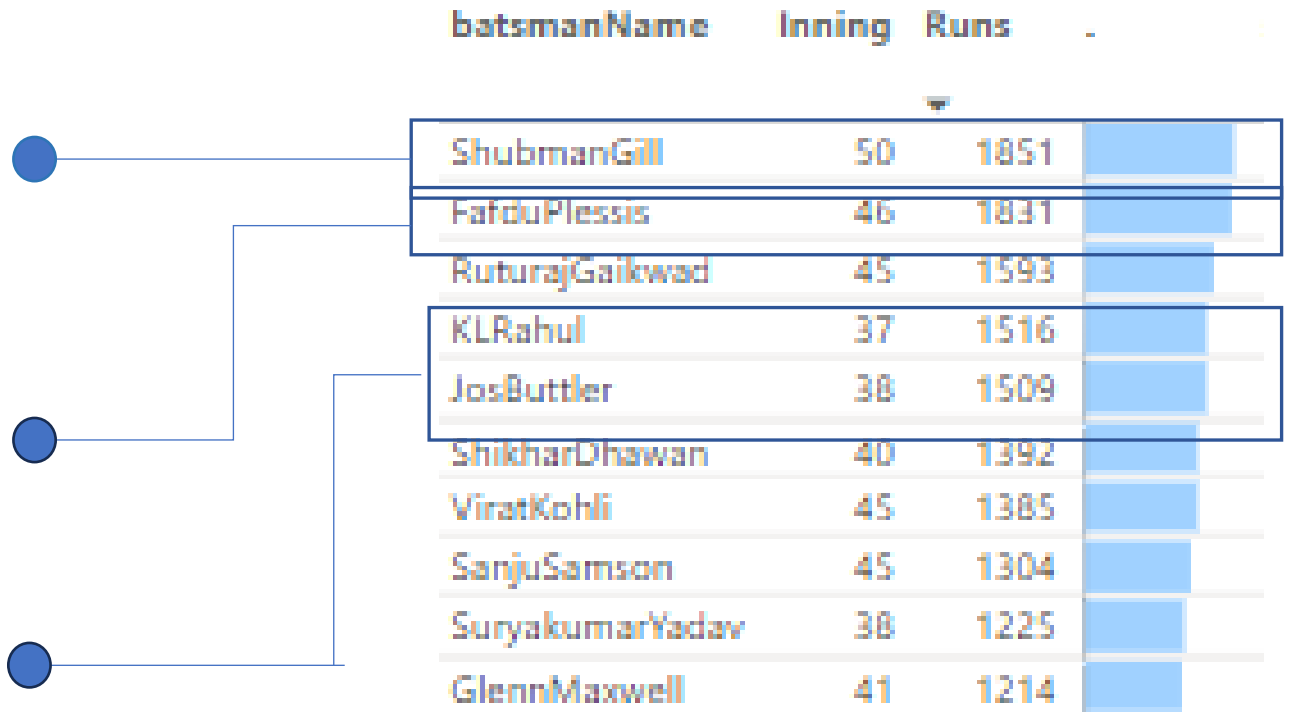
BATTING ANALYSIS

1. Top 10 batsmen based on past 3 years total runs scored.

SHUBMAN GILL AS THE MAXIMUM **RUNS OF 1851** OVER PAST 3 YEARS AND HAS PLAYED 50 INNINGS

SECOND highest total runs were set by **FAFDUPLESSIS** of over **1831** and has played total innings of 46

even though **KLRAHUL** AND **JOSBUTTLER** got to play 37 and 38 innings to play they ended up in top 5 in total runs



batsmanName	Inning	Runs
ShubmanGill	50	1851
FafduPlessis	46	1831
RuturajGaikwad	45	1593
KLRahul	37	1516
JosButtler	38	1509
ShikharDhawan	40	1392
ViratKohli	45	1385
SanjuSamson	45	1304
SuryakumarYadav	38	1225
GlennMaxwell	41	1214

2. Top 10 batsmen based on past 3 years batting average

KLRAHUL has the highest batting average above 50 i.e (50.53)

FAFDUPLESSIS,JOSBUTTLER, SHUBMAN GILL has the batting avg above 40

batsmanName	Inning	Runs	.	strike rate	Batting Avg
KLRahul	37	1516		40.97	50.53
FafduPlessis	46	1831		39.80	43.60
JosButtler	38	1509		39.71	41.92
ShubmanGill	50	1851		37.02	40.24
ShikharDhawan	40	1392		34.80	39.77
RuturajGaikwad	45	1593		35.40	37.93
SuryakumarYadav	38	1225		32.24	35.00
GlennMaxwell	41	1214		29.61	34.69
ViratKohli	45	1385		30.78	33.78
SanjuSamson	45	1304		28.98	32.60

3. Top 10 batsmen based on past 3 years strike rate.

KLRAHUL has the highest capacity of making runs and has a strike rate 40.97

Followed by **FAFDUPLESSIS** and **JOSBUTTLER** has strike rate more then **39.**

batsmanName	Inning	Runs	strike rate
KLRahul	37	1516	40.97
FafduPlessis	46	1831	39.80
JosButtler	38	1509	39.71
ShubmanGill	50	1851	37.02
RuturajGaikwad	45	1593	35.40
ShikharDhawan	40	1392	34.80
SuryakumarYadav	38	1225	32.24
ViratKohli	45	1385	30.78
GlennMaxwell	41	1214	29.61
SanjuSamson	45	1304	28.98

4. Top 5 batsmen based on past 3 years boundary %

JOSBUTTLER,GLENNMAXWELL ,SURYAKUMARYADAV has the capacity to hit six and fours .they has the boundary% of **above 68%**

SANJUSAMSON,SHIKHARDHAWAN are in the top 5 bats man to hit boundaries and has boundary % 65.49% and 62%

batsmanName	Inning	Runs	.	strike rate	Batting Avg	boundary%
JosButtler	38	1509		39.71	41.92	68.92
GlennMaxwell	41	1214		29.61	34.69	68.70
SuryakumarYadav	38	1225		32.24	35.00	68.24
SanjuSamson	45	1304		28.98	32.60	65.49
ShikharDhawan	40	1392		34.80	39.77	62.07
RuturajGaikwad	45	1593		35.40	37.93	61.14
FafduPlessis	46	1831		39.80	43.60	60.51
ShubmanGill	50	1851		37.02	40.24	58.35
KLRahul	37	1516		40.97	50.53	57.26
ViratKohli	45	1385		30.78	33.78	54.73

BOWLER ANALYSIS

1. Top 10 bowlers based on past 3 years wickets taken.

HIGHEST wicket taker is **MOHAMMED SHAMI** .he has taken **47 wicket** and hold 1 rank .in past 3 years

RASHID KHAN and **YUZVENDRACHAHA**L hold second position with **46 wickets** in past 3 years

bowlerName	W
MohammedShami	47
RashidKhan	46
YuzvendraChahal	46
MohammedSiraj	44
HarshalPatel	43
RavichandranAshwin	42
SunilNarine	42
VarunChakravarthy	42
RavindraJadeja	41
ArshdeepSingh	40
TrentBoult	40

2.. Top 10 bowlers based on past 3 years bowling average.

HARSHAL PATEL ,ARSHDEEPSINGH AND TRENTBOULT has the highest bowling avg of 30 to 31

MOHAMMED SHAMI holds the 4th position with bowling avg of 29.89

bowlerName	W	bowling avg
HarshalPatel	43	30.77
ArshdeepSingh	40	30.50
TrentBoult	40	30.25
MohammedShami	47	29.89
YuzvendraChahal	46	28.98
VarunChakravarthy	42	28.79
RashidKhan	46	28.63
MohammedSiraj	44	28.23
RavichandranAshwin	42	27.98
SunilNarine	42	25.14
RavindraJadeja	41	24.73

3. Top 10 bowlers based on past 3 years economy rate.

MOHAMMED SHAMI has an excellent bowling economy of nearly 17.55

YUZVENDRACHAHAL has the second highest economy of nearly 16.65 followed by HARSHAL and RASHID 16

bowlerName	W	bowling avg	Econ
MohammedShami	47	29.89	17.55
YuzvendraChahal	46	28.98	16.65
HarshalPatel	43	30.77	16.52
RashidKhan	46	28.63	16.45
MohammedSiraj	44	28.23	15.51
ArshdeepSingh	40	30.50	15.24
TrentBoult	40	30.25	15.11
VarunChakravarthy	42	28.79	15.10
RavichandranAshwin	42	27.98	14.67
SunilNarine	42	25.14	13.19
RavindraJadeja	41	24.73	12.66

4. Top 10 bowlers based on past 3 years economy rate.

MOHAMMED SHAMI has an highest dot ball % of nearly 1.06%

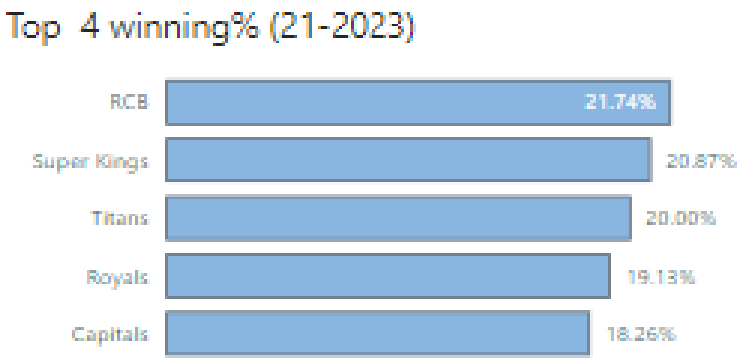
MOHAMMED SIRAJ has the second highest dot ball % of around 0.91%

bowlerName	W	bowling avg	Econ	dot ball %
MohammedShami	47	29.89	17.55	1.06%
MohammedSiraj	44	28.23	15.51	0.91%
TrentBoult	40	30.25	15.11	0.88%
RashidKhan	46	28.63	16.45	0.80%
VarunChakravarthy	42	28.79	15.10	0.75%
YuzvendraChahal	46	28.98	16.65	0.75%
SunilNarine	42	25.14	13.19	0.75%
HarshalPatel	43	30.77	16.52	0.71%
ArshdeepSingh	40	30.50	15.24	0.65%
RavichandranAshwin	42	27.98	14.67	0.61%
Ravindraladeja	41	24.73	12.66	0.56%

TEAM ANALYSIS

Top 4 teams based on past 3 years winning %.

On the base of past 3 year of data **RCB** has the highest winning % of 21.74%.
followed by **SUPER KINGS** and TITANS has nearly the same winning %



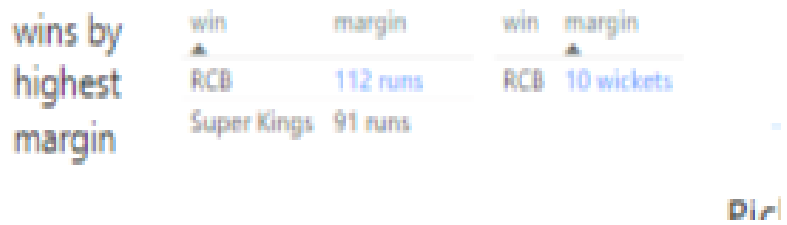
Top 3 All-Rounder (2021-2023)

batsmanName	Runs	SR	Avg
HardikPandya	960	23.41	30.97
Venkateshlyer	956	26.56	28.12
ShivamDube	937	27.56	32.31

Top 2 team with highest wins by chasing target over past 3years

RCB and **SUPER KING** are the top 2 teams won by highest margin of **112** and **91 runs** .

And by wickets **RCB** has won by **10 wickets**



PREDICTION

Orange cap

1.Virat Kholi (runs-361,batting avg-72.20)

2.Riyan Parag (runs-318,batting avg-63.60)

purple cap

1.Jasprit Bumrah (winckets-13,economy-5.93)

2.Gerald Coetzee (wickets-12,economy-9.92)

2.Yuzvendra Chahal (wicket-12,economy-8.34)

*as of 2024 points table

3. Winner and runner-up

Winner-**CSK** Runner up-**RR**

2. Top 4 qualifying teams

CSK **KKR** **RR** **SRH**

BEST 11 TEAM

Pick Your Best 11

name	playingRole	Innings	Runs	Batting Avg	strike rate	boundary%	Wicket	bowling avg	Economy	dot ball %
ShubmanGill	Opening Batter	50	1851	40.24	37.02	58.35				
FafduPlessis	Middle order Batter	46	1831	43.60	39.80	60.51				
RuturajGaikwad	Batter	45	1593	37.93	35.40	61.14				
KLRahul	Wicketkeeper Batter	37	1516	50.53	40.97	57.26				
ShikharDhawan	Opening Batter	40	1392	39.77	34.80	62.07				
GlennMaxwell	Batting Allrounder	41	1214	34.69	29.61	68.70	23	17.13	314.36	14.23%
RavindraJadeja	Allrounder	34	533	31.35	15.68	52.91	41	24.73	1,572.09	69.25%
RashidKhan	Bowling Allrounder	26	304	20.27	11.69	73.68	46	28.63	4,594.19	223.26%
MohammedSiraj	Bowler	11	51	12.75	4.64	58.82	44	28.23	12,216.39	718.03%
MohammedShami	Bowler	6	18	6.00	3.00	22.22	47	29.89	36,652.17	2217.39%
YuzvendraChahal	Bowler	4	15	15.00	3.75	0.00	46	28.98	22,851.43	1031.43%

Thank you