

Problem Statement

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

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.

Task:

Imagine yourself as Peter Pandey and perform the following task.

• Begin your analysis by referring to the 'Primary And Secondary Analysis'. You can use any tool of your choice (Python, SQL, Power BI, Tableau, Excel, PowerPoint) to analyse and answer these questions.



Primary Analysis

- 1. Top 10 batsmen based on past 3 years total runs scored. (min 60 balls faced in each season)
- 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 5 batsmen based on past 3 years boundary % (fours and sixes).
- 5. Top 10 bowlers based on past 3 years total wickets taken.
- 6. Top 10 bowlers based on past 3 years bowling average. (min 60 balls bowled in each season)
- 7. Top 10 bowlers based on past 3 years economy rate. (min 60 balls bowled in each season)
- 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.

Secondary Analysis

Predict the following for the season 2024 using available data and by doing additional research,

- 1. Orange and purple cap player.
- 2. Top 4 qualifying teams.
- 3. Winner and runner-up

Your Picks:

- 4. Pick your team selecting the Best 11 players based on their positions, 3 years performance data and additional research.
- 5. Pick your top 3 all-rounders



Primary Analysis

1. Top 10 batsmen based on past 3 years total runs scored. (min 60 balls faced in each season)

smen (minimu	m 60 balls faced in each se	eason)						
Batting Style	Playing Role	Team	Balls Faced	~	Total Runs	Batting Average	Strike Rate	Boundary %
Right hand Bat	Opening Batter	KKR	564		890	59.33	157.80	60.45%
Right hand Bat	Wicketkeeper Batter	Rajasthan Royals	579		863	57.53	149.05	69.76%
Right hand Bat	Middle order Batter	Chennai Super Kings	475		730	56.15	153.68	62.47%
Left hand Bat	Wicketkeeper Batter	Chennai Super Kings	481		672	51.69	139.71	61.90%
Right hand Bat	Top order Batter	RCB	457		639	53.25	139.82	55.71%
Right hand Bat	Batter	Chennai Super Kings	466		635	45.36	136.27	62.05%
Right hand Bat	Middle order Batter	Chennai Super Kings	458		633	45.21	138.21	59.72%
Right hand Bat	Wicketkeeper Batter	Punjab Kings	451		626	62.60	138.80	59.42%
Left hand Bat	Opening Batter	Rajasthan Royals	382		625	48.08	163.61	77.44%
Right hand Bat	Wicketkeeper Batter	Punjab Kings	455		616	51.33	135.38	58.44%
	Right hand Bat Right hand Bat Right hand Bat Right hand Bat Left hand Bat Right hand Bat Left hand Bat	Right hand Bat Opening Batter Right hand Bat Wicketkeeper Batter Right hand Bat Middle order Batter Left hand Bat Wicketkeeper Batter Right hand Bat Top order Batter Right hand Bat Batter Right hand Bat Batter Right hand Bat Middle order Batter Right hand Bat Wicketkeeper Batter Left hand Bat Opening Batter	Right hand Bat Opening Batter KKR Right hand Bat Wicketkeeper Batter Rajasthan Royals Right hand Bat Middle order Batter Chennai Super Kings Left hand Bat Wicketkeeper Batter Chennai Super Kings Right hand Bat Top order Batter RCB Right hand Bat Batter Chennai Super Kings Right hand Bat Middle order Batter Chennai Super Kings Right hand Bat Middle order Batter Chennai Super Kings Right hand Bat Wicketkeeper Batter Punjab Kings Left hand Bat Opening Batter Rajasthan Royals	Right hand Bat Opening Batter KKR 564 Right hand Bat Wicketkeeper Batter Rajasthan Royals 579 Right hand Bat Middle order Batter Chennai Super Kings 475 Left hand Bat Wicketkeeper Batter Chennai Super Kings 481 Right hand Bat Top order Batter RCB 457 Right hand Bat Batter Chennai Super Kings 466 Right hand Bat Middle order Batter Chennai Super Kings 458 Right hand Bat Wicketkeeper Batter Chennai Super Kings 458 Right hand Bat Wicketkeeper Batter Chennai Super Kings 451 Left hand Bat Opening Batter Rajasthan Royals 382	Right hand Bat Opening Batter KKR 564 Right hand Bat Wicketkeeper Batter Rajasthan Royals 579 Right hand Bat Middle order Batter Chennai Super Kings 475 Left hand Bat Wicketkeeper Batter Chennai Super Kings 481 Right hand Bat Top order Batter RCB 457 Right hand Bat Batter Chennai Super Kings 466 Right hand Bat Middle order Batter Chennai Super Kings 458 Right hand Bat Middle order Batter Chennai Super Kings 451 Left hand Bat Wicketkeeper Batter Punjab Kings 451 Left hand Bat Opening Batter Rajasthan Royals 382	Batting StylePlaying RoleTeamBalls FacedTotal RunsRight hand BatOpening BatterKKR564890Right hand BatWicketkeeper BatterRajasthan Royals579863Right hand BatMiddle order BatterChennai Super Kings475730Left hand BatWicketkeeper BatterChennai Super Kings481672Right hand BatTop order BatterRCB457639Right hand BatBatterChennai Super Kings466635Right hand BatMiddle order BatterChennai Super Kings458633Right hand BatWicketkeeper BatterPunjab Kings451626Left hand BatOpening BatterRajasthan Royals382625	Batting StylePlaying RoleTeamBalls FacedTotal RunsBatting AverageRight hand BatOpening BatterKKR56489059.33Right hand BatWicketkeeper BatterRajasthan Royals57986357.53Right hand BatMiddle order BatterChennai Super Kings47573056.15Left hand BatWicketkeeper BatterChennai Super Kings48167251.69Right hand BatTop order BatterRCB45763953.25Right hand BatBatterChennai Super Kings46663545.36Right hand BatMiddle order BatterChennai Super Kings45863345.21Right hand BatWicketkeeper BatterPunjab Kings45162662.60Left hand BatOpening BatterRajasthan Royals38262548.08	Batting StylePlaying RoleTeamBalls FacedTotal RunsBatting AverageStrike RateRight hand BatOpening BatterKKR56489059.33157.80Right hand BatWicketkeeper BatterRajasthan Royals57986357.53149.05Right hand BatMiddle order BatterChennai Super Kings47573056.15153.68Left hand BatWicketkeeper BatterChennai Super Kings48167251.69139.71Right hand BatTop order BatterRCB45763953.25139.82Right hand BatBatterChennai Super Kings46663545.36136.27Right hand BatMiddle order BatterChennai Super Kings45863345.21138.21Right hand BatWicketkeeper BatterPunjab Kings45162662.60138.80Left hand BatOpening BatterRajasthan Royals38262548.08163.61



2. Top 10 batsmen based on past 3 years batting average. (min 60 balls faced in each season)

<u> Top 10 Bat</u> s	<u>smen</u> (minimu	m 60 balls faced in each se	eason)					
batsmanName	Batting Style	Playing Role	Team	Balls Faced	Total Runs	Batting Average	Strike Rate	Boundary %
RavindraJadeja	Left hand Bat	Allrounder	Chennai Super Kings	156	227	75.67	145.51	57.27%
DavidMiller	Left hand Bat	Middle order Batter	Rajasthan Royals	337	481	68.71	142.73	55.30%
KLRahul	Right hand Bat	Wicketkeeper Batter	Punjab Kings	451	626	62.60	138.80	59.42%
ShubmanGill	Right hand Bat	Opening Batter	KKR	564	890	59.33	157.80	60.45%
RinkuSingh	Left hand Bat	Middle order Batter	KKR	317	474	59.25	149.53	62.87%
JosButtler	Right hand Bat	Wicketkeeper Batter	Rajasthan Royals	579	863	57.53	149.05	69.76%
SaurabhTiwary	Left hand Bat	Top order Batter	Mumbai Indians	97	115	57.50	118.56	45.22%
FafduPlessis	Right hand Bat	Middle order Batter	Chennai Super Kings	475	730	56.15	153.68	62.47%
RajatPatidar	Right hand Bat	Top order Batter	RCB	218	333	55.50	152.75	64.86%
DineshKarthik	Right hand Bat	Wicketkeeper Batter	KKR	180	330	55.00	183.33	72.73%
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3. Top 10 batsmen based on past 3 years strike rate (min 60 balls faced in each season)

men (minimun	n 60 balls faced in each se	ason)					
Batting Style	Playing Role	Team	Balls Faced	Total Runs	Batting Average	Strike Rate	Boundary %
Right hand Bat	Middle order Batter	RCB	86	186	37.20	216.28	77.42%
Left hand Bat	Wicketkeeper Batter	Punjab Kings	176	338	30.73	192.05	76.92%
Right hand Bat	Batting Allrounder	RCB	218	400	33.33	183.49	75.50%
Right hand Bat	Wicketkeeper Batter	KKR	180	330	55.00	183.33	72.73%
Right hand Bat	Batting Allrounder	Rajasthan Royals	240	437	36.42	182.08	73.23%
Right hand Bat	Batter	Mumbai Indians	334	605	43.21	181.14	70.74%
Right hand Bat	Wicketkeeper Batter	Sunrisers Hyderabad	253	448	49.78	177.08	62.05%
Right hand Bat	Allrounder	KKR	192	335	37.22	174.48	78.81%
Right hand Bat	Wicketkeeper Batter	Rajasthan Royals	88	152	21.71	172.73	64.47%
Right hand Bat	Top order Batter	Delhi Capitals	189	326	32.60	172.49	58.90%
	Batting Style Right hand Bat Left hand Bat Right hand Bat	Batting Style Playing Role Right hand Bat Middle order Batter Left hand Bat Wicketkeeper Batter Right hand Bat Batting Allrounder Right hand Bat Wicketkeeper Batter Right hand Bat Batting Allrounder Right hand Bat Batter Right hand Bat Wicketkeeper Batter Right hand Bat Wicketkeeper Batter Right hand Bat Allrounder Right hand Bat Wicketkeeper Batter	Right hand Bat Middle order Batter RCB Left hand Bat Wicketkeeper Batter Punjab Kings Right hand Bat Batting Allrounder RCB Right hand Bat Wicketkeeper Batter KKR Right hand Bat Batting Allrounder Rajasthan Royals Right hand Bat Batter Mumbai Indians Right hand Bat Wicketkeeper Batter Sunrisers Hyderabad Right hand Bat Allrounder KKR Right hand Bat Wicketkeeper Batter Rajasthan Royals	Batting StylePlaying RoleTeamBalls FacedRight hand BatMiddle order BatterRCB86Left hand BatWicketkeeper BatterPunjab Kings176Right hand BatBatting AllrounderRCB218Right hand BatWicketkeeper BatterKKR180Right hand BatBatting AllrounderRajasthan Royals240Right hand BatBatterMumbai Indians334Right hand BatWicketkeeper BatterSunrisers Hyderabad253Right hand BatAllrounderKKR192Right hand BatWicketkeeper BatterRajasthan Royals88	Batting StylePlaying RoleTeamBalls FacedTotal RunsRight hand BatMiddle order BatterRCB86186Left hand BatWicketkeeper BatterPunjab Kings176338Right hand BatBatting AllrounderRCB218400Right hand BatWicketkeeper BatterKKR180330Right hand BatBatting AllrounderRajasthan Royals240437Right hand BatBatterMumbai Indians334605Right hand BatWicketkeeper BatterSunrisers Hyderabad253448Right hand BatAllrounderKKR192335Right hand BatWicketkeeper BatterRajasthan Royals88152	Right hand Bat Middle order Batter RCB 86 186 37.20 Left hand Bat Wicketkeeper Batter Punjab Kings 176 338 30.73 Right hand Bat Batting Allrounder RCB 218 400 33.33 Right hand Bat Wicketkeeper Batter KKR 180 330 55.00 Right hand Bat Batting Allrounder Rajasthan Royals 240 437 36.42 Right hand Bat Batter Mumbai Indians 334 605 43.21 Right hand Bat Wicketkeeper Batter Sunrisers Hyderabad 253 448 49.78 Right hand Bat Allrounder KKR 192 335 37.22 Right hand Bat Wicketkeeper Batter Rajasthan Royals 88 152 21.71	Batting StylePlaying RoleTeamBalls FacedTotal RunsBatting AverageStrike RateRight hand BatMiddle order BatterRCB8618637.20216.28Left hand BatWicketkeeper BatterPunjab Kings17633830.73192.05Right hand BatBatting AllrounderRCB21840033.33183.49Right hand BatWicketkeeper BatterKKR18033055.00183.33Right hand BatBatting AllrounderRajasthan Royals24043736.42182.08Right hand BatBatterMumbai Indians33460543.21181.14Right hand BatWicketkeeper BatterSunrisers Hyderabad25344849.78177.08Right hand BatAllrounderKKR19233537.22174.48Right hand BatWicketkeeper BatterRajasthan Royals8815221.71172.73



4. Top 5 batsmen based on past 3 years boundary % (fours and sixes).

<u>Top 5 Batsm</u>	<u>ien</u> (minimum 60	balls faced in each seasor	n)					
batsmanName	Batting Style	Playing Role	Team	Balls Faced	Total Runs	Batting Average	Strike Rate	Boundary %
AndreRussell	Right hand Bat	Allrounder	KKR	192	335	37.22	174.48	78.81%
YashasviJaiswal	Left hand Bat	Opening Batter	Rajasthan Royals	382	625	48.08	163.61	77.44%
TimDavid	Right hand Bat	Middle order Batter	RCB	86	186	37.20	216.28	77.42%
NicholasPooran	Left hand Bat	Wicketkeeper Batter	Punjab Kings	176	338	30.73	192.05	76.92%
AndreRussell	Right hand Bat	Allrounder	KKR	120	183	26.14	152.50	76.50%



5. Top 10 bowlers based on past 3 years total wickets taken.

TOP TO DOWNEL (minimum 60 balls bowled in each season	Top 10 Bowler (minimum 60 balls bowler	ed in each season)
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Bowler Name	Bowling Style	Team	Balls	Wickets	Dot Ball %	Economy Rate	Bowling Average	Run Conceded	Wides
MohammedShami	Right arm Fast	Punjab Kings	1072	67	0.48	7.86	20.97	1405	47
YuzvendraChahal	Legbreak Googly	RCB	1043	66	0.35	7.67	20.20	1333	46
HarshalPatel	Right arm Medium	RCB	941	65	0.36	8.44	20.35	1323	43
RashidKhan	Legbreak Googly	Sunrisers Hyderabad	1097	63	0.35	7.20	20.90	1317	46
AveshKhan	Right arm Fast medium	Delhi Capitals	802	47	0.42	8.34	23.72	1115	37
KagisoRabada	Right arm Fast	Delhi Capitals	744	45	0.43	8.62	23.76	1069	33
ArshdeepSingh	Left arm Medium fast	Punjab Kings	853	45	0.37	8.58	27.11	1220	40
VarunChakravarthy	Legbreak Googly	KKR	958	44	0.38	7.57	27.48	1209	42
ShardulThakur	Right arm Medium	Chennai Super Kings	775	43	0.36	9.45	28.37	1220	39
TrentBoult	Left arm Fast medium	Mumbai Indians	908	42	0.46	8.00	28.81	1210	40



6. Top 10 bowlers based on past 3 years bowling average. (min 60 balls bowled in each season)

Т	op 1	.0	Bowler	(minimum 60 balls bowled in each season)
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Bowler Name	Bowling Style	Team	Balls	Wickets	Dot Ball %	Economy Rate	Bowling Average	Run Conceded	Wides
JofraArcher	Right arm Fast	Mumbai Indians	120	2	0.41	9.50	95.00	190	5
FabianAllen	Slow Left arm Orthodox	Punjab Kings	66	1	0.30	8.18	90.00	90	3
MayankDagar	Slow Left arm Orthodox	Sunrisers Hyderabad	66	1	0.33	7.55	83.00	83	3
DeepakHooda	Right arm Offbreak	Punjab Kings	96	2	0.32	8.50	68.00	136	7
JayantYadav	Right arm Offbreak	Mumbai Indians	102	2	0.43	7.65	65.00	130	5
HrithikShokeen	Right arm Offbreak	Mumbai Indians	204	5	0.40	9.24	62.80	314	13
AbhishekSharma	Slow Left arm Orthodox	Sunrisers Hyderabad	72	2	0.32	10.33	62.00	124	5
CameronGreen	Right arm Fast medium	Mumbai Indians	228	6	0.39	9.50	60.17	361	16
AndrewTye	Right arm Medium fast	Lucknow Super Giants	66	2	0.36	9.73	53.50	107	3
ChrisJordan	Right arm Fast medium	Punjab Kings	281	9	0.33	9.99	52.00	468	14



7. Top 10 bowlers based on past 3 years economy rate. (min 60 balls bowled in each season)

Top 10 Bowler (minimum 60 balls bowled in each season)

Bowler Name	Bowling Style	Team	Balls		Wickets	Dot Ball %	Economy Rate	Bowling Average	Run Conceded	Wides
ArshadKhan	Left arm Medium	Mumbai Indians	85	ı	5	0.32	13.41	38.00	190	6
OdeanSmith	Right arm Fast medium	Punjab Kings	90		6	0.40	11.87	29.67	178	6
TymalMills	Left arm Fast	Mumbai Indians	102		6	0.29	11.18	31.67	190	5
AkashDeep	Right arm Fast medium	RCB	113	ı	5	0.35	10.88	41.00	205	5
JhyeRichardson	Right arm Fast	Punjab Kings	66	I	3	0.36	10.64	39.00	117	3
VijaykumarVyshak	Right arm Medium	RCB	144		9	0.28	10.54	28.11	253	7
MukeshKumar	Right arm Medium	Delhi Capitals	186		7	0.35	10.52	46.57	326	10
LungiNgidi	Right arm Fast medium	Chennai Super Kings	72	ı	5	0.35	10.42	25.00	125	3
KarnSharma	Legbreak Googly	RCB	129		10	0.30	10.37	22.30	223	7
AbhishekSharma	Slow Left arm Orthodox	Sunrisers Hyderabad	72	1	2	0.32	10.33	62.00	124	5



8. Top 5 bowlers based on past 3 years dot ball %.

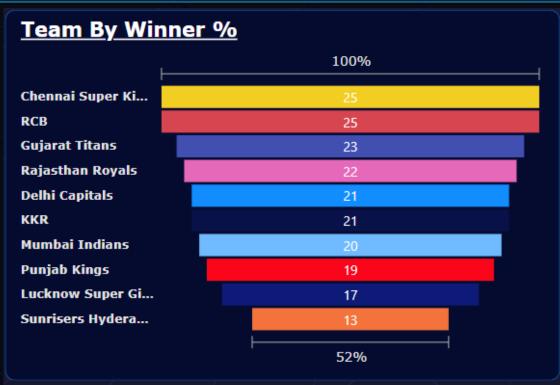
Top 10 Bowler (minimum 60 balls bowled in each season)

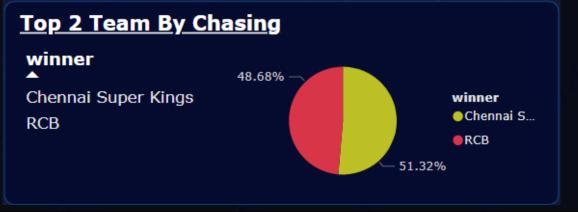
Bowler Name	Bowling Style	Team	Balls	Wicket	5 Dot Ball %	Economy Rate	Bowling Average	Run Conceded	Wides
SimarjeetSingh	Right arm Medium fast	Chennai Super Kings	108	4	0.53	7.67	34.50	138	6
MohsinKhan	Left arm Medium fast	Lucknow Super Giants	258	17	0.50	7.07	17.88	304	13
ChrisWoakes	Right arm Fast medium	Delhi Capitals	66	5	0.50	7.45	16.40	82	3
MarkWood	Right arm Fast	Lucknow Super Giants	96	11	0.50	8.13	11.82	130	4
HarshitRana	Right arm Fast	KKR	102	5	0.49	8.65	29.40	147	6
PrasidhKrishna	Right arm Fast medium	KKR	630	31	0.48	8.59	29.10	902	27
MohammedSiraj	Right arm Fast	RCB	918	39	0.48	8.12	31.85	1242	44
MohammedShami	Right arm Fast	Punjab Kings	1072	67	0.48	7.86	20.97	1405	47
TrentBoult	Left arm Fast medium	Mumbai Indians	908	42	0.46	8.00	28.81	1210	40
DushmanthaChameera	Right arm Fast	Lucknow Super Giants	264	9	0.46	8.73	42.67	384	12



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.







Secondary Analysis

1. Orange and purple cap player.

2. Top 4 qualifying teams.

3. Winner and runner-up

Player's Performance

Orange Cap Player

ShubmanGill

Purple Cap Player



MohammedShami

Teams Performance

Top 4 Qualifying Teams

Team Name

Chennai Super Kings **Gujarat Titans** Rajasthan Royals **RCB**

Winner And Runner-up

Team Name

Chennai Super Kings **RCB**



4. Pick your team selecting the Best 11 players based on their positions, 3 years performance data and additional research

orts leam	s Analysis	Best 11							
	er's Name	Team	Playing Role	Batting Style	Bowling Style	Batting Average	Strike Rate	Bowling Average	Ecc
ABdeVilli	ers	RCB	Wicketkeepe r Batter	Right hand Bat	Right arm Medium	31.30	148.34		
ronFinch AxarPate	ı	Delhi Capitals	Bowling Allrounder	Left hand Bat	Slow Left arm Orthodox	26.58	136.86	31.30	7
deVilliers BenStoke	es I	Rajasthan Royals	Allrounder	Left hand Bat	Right arm Fast medium	5.00	88.24	0.00	1
odulBasith DavidWa	rner	Sunrisers Hyderabad	Opening Batter	Left hand Bat	Legbreak	37.90	133.45		
hijeetTomar KuldeepY	'adav	Delhi Capitals	Bowler	Left hand Bat	Left arm Wrist spin	26.33	79.00	25.16	7
ohinavManohar MSDhoni		Chennai Super Kings	Wicketkeepe r Batter	Right hand Bat	Right arm Medium	25.00	127.84		
ohishekSharma ShardulT oishekPorel	hakur	Chennai Super Kings	Bowler	Right hand Bat	Right arm Medium	13.22	146.91	28.37	Ç
lamMilne Suryakur	narYadav	Mumbai Indians	Batter	Right hand Bat	Right arm Medium, Right arm Offbreak	35.00	160.55		
lamZampa TrentBou	lt	Mumbai Indians	Bowler	Right hand Bat	Left arm Fast medium	19.00	121.28	28.81	ε
denMarkram	i	RCB	Top order Batter	Right hand Bat	Right arm Medium	33.78	127.06		
inkyaRahane Yashasvii kashDeep	Jaiswal I	Rajasthan Royals	Opening Batter	Left hand Bat	Legbreak	34.30	152.15	0.00	30
kashMadhwal									



5. Pick your top 3 all-rounders.





* Thank You *