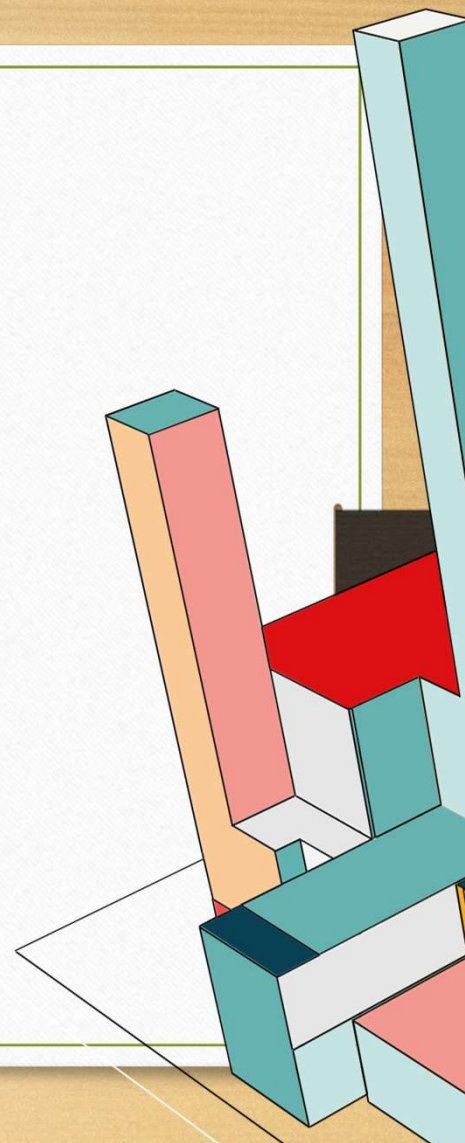


# IPL AUCTION STRATEGY

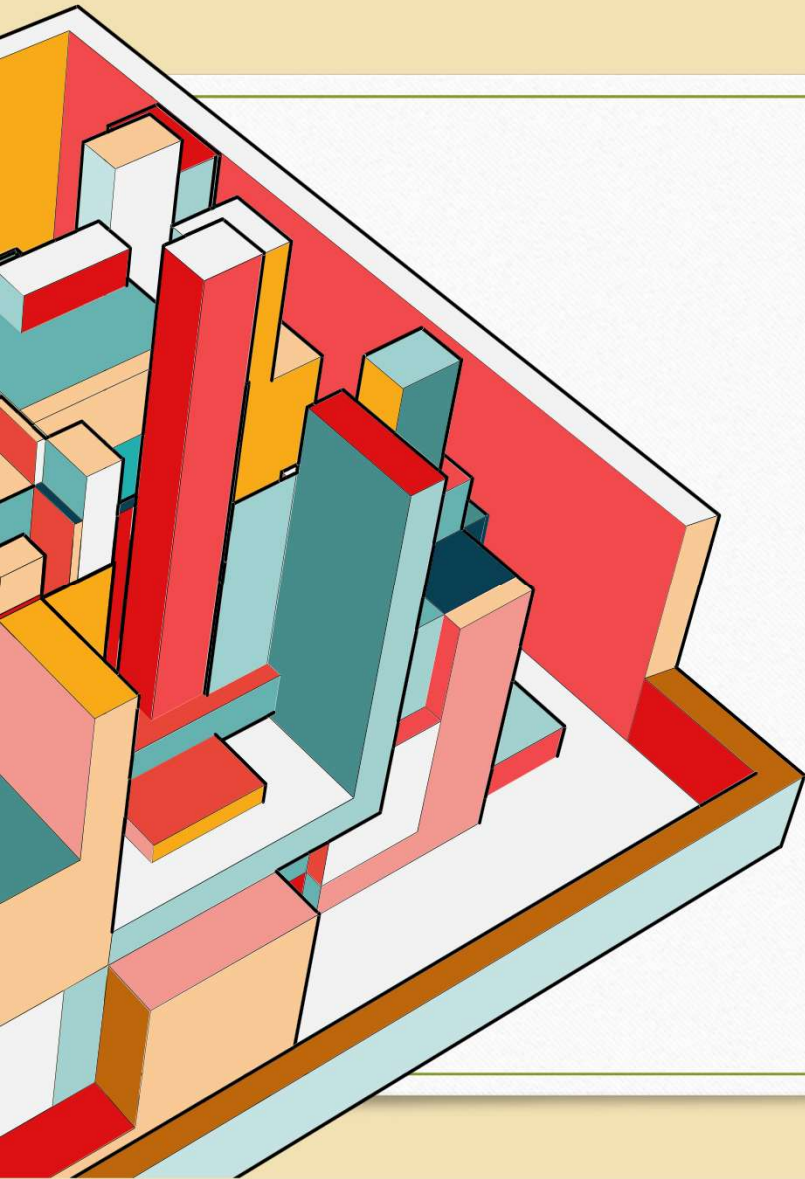
vishal desai

# Agenda

- Motive
- Batters
- Bowlers
- Allrounders
- Wicketkeepers
- Extra Questions







## Motive

**Planning an IPL auction strategy for a new team by looking at past IPL data to create a balanced squad, by picking 10 players in each category and choosing 2–3 from each.**

Batters

# Types of Batsmen

---

## **1 . Aggressive Batsman**

*Plays attacking shots to score quickly and put pressure on bowlers from the start.*

## **2 . Anchor Batsman**

*Plays steadily, holds one end, and builds a solid foundation for the innings.*

## **3 . Hard-hitting Batsman**

*Can hit long shots, accelerates the scoring rate, especially in last overs.*

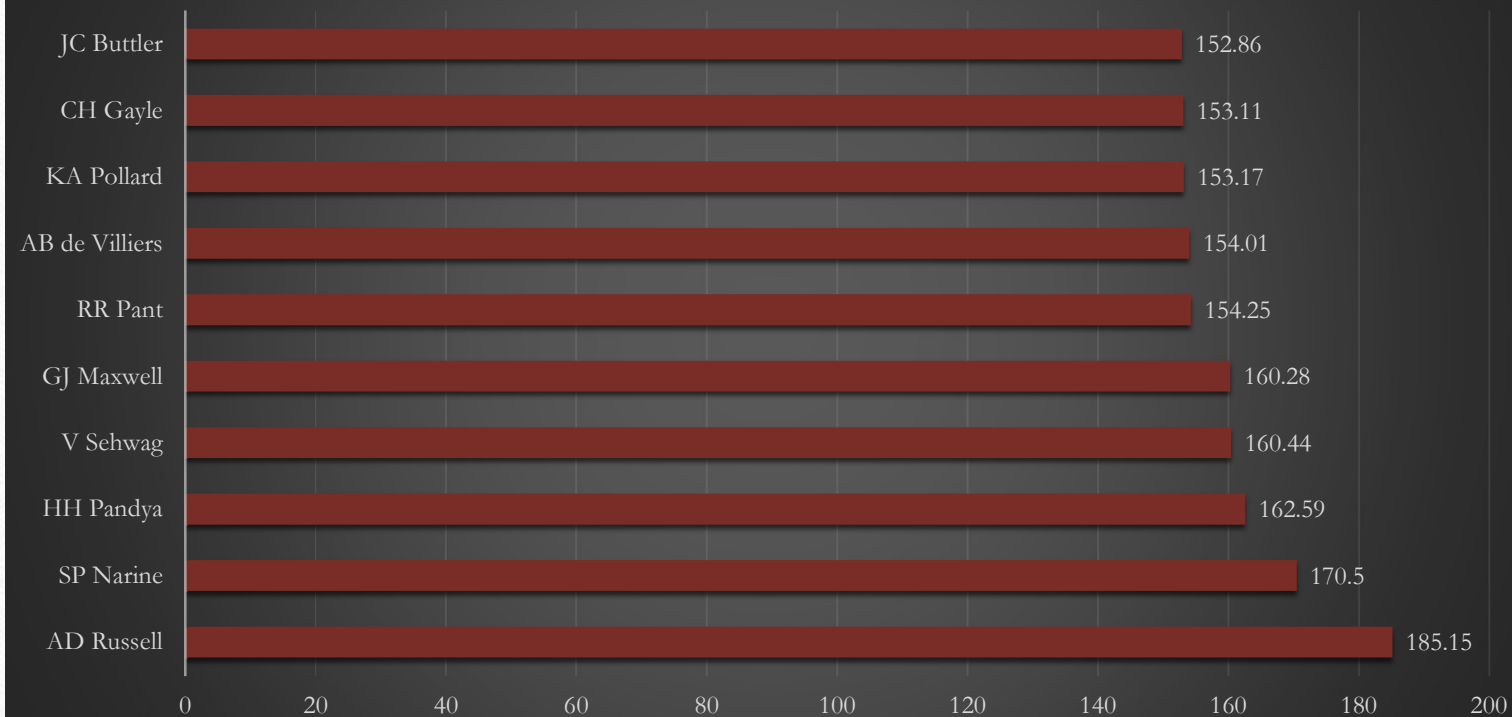


## Aggressive batters

```
SELECT batsman,  
SUM(batsman_runs) AS total_runs,  
COUNT(batsman) AS balls_faced,  
(ROUND((SUM(batsman_runs) * 100.0 /  
COUNT(batsman)), 2)) AS strike_rate  
FROM IPL_Ball  
WHERE extra_runs = 0  
GROUP BY batsman  
HAVING COUNT(batsman) >= 500 AND  
(SUM(batsman_runs) * 100.0 /  
COUNT(batsman)) >= 150  
ORDER BY strike_rate DESC;
```

|    | batsman        | total_runs | balls_faced | strike_rate      |
|----|----------------|------------|-------------|------------------|
| 1  | AD Russell     | 1509       | 815         | 185.150000000000 |
| 2  | SP Narine      | 890        | 522         | 170.500000000000 |
| 3  | HH Pandya      | 1343       | 826         | 162.590000000000 |
| 4  | V Sehwag       | 2713       | 1691        | 160.440000000000 |
| 5  | GJ Maxwell     | 1497       | 934         | 160.280000000000 |
| 6  | RR Pant        | 2067       | 1340        | 154.250000000000 |
| 7  | AB de Villiers | 4816       | 3127        | 154.010000000000 |
| 8  | KA Pollard     | 2999       | 1958        | 153.170000000000 |
| 9  | CH Gayle       | 4731       | 3090        | 153.110000000000 |
| 10 | JC Buttler     | 1712       | 1120        | 152.860000000000 |

## Aggressive batters





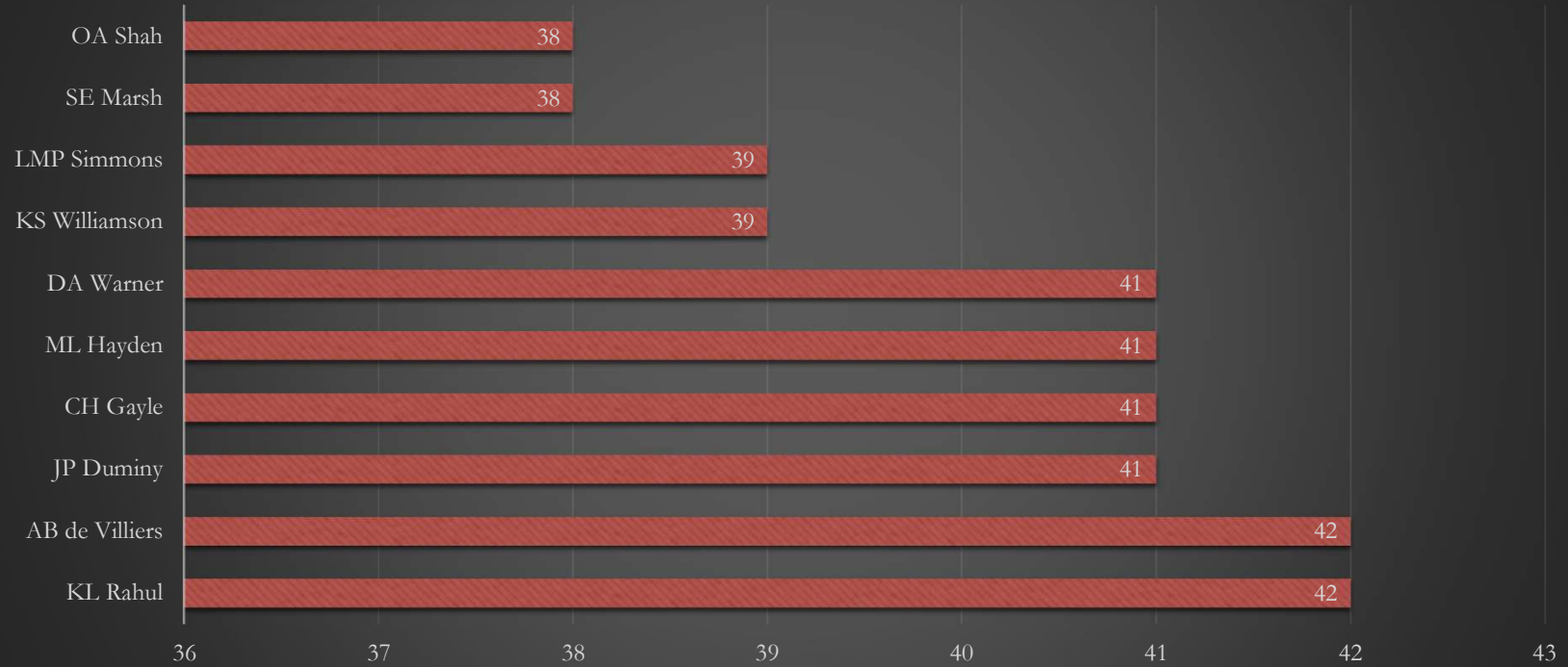
## Anchor batters

```
SELECT
b.batsman,
SUM(b.batsman_runs) AS total_runs,
SUM(CAST(b.is_wicket AS INT)) AS total_out,
COUNT(DISTINCT YEAR(m.[date])) AS seasons_played,
ROUND(SUM(b.batsman_runs) / SUM(CAST(b.is_wicket AS
INT)), 2) AS batting_average
FROM IPL_Ball b
JOIN IPL_matches m
ON b.id = m.id
GROUP BY b.batsman
HAVING SUM(b.batsman_runs) >500 and
SUM(CAST(b.is_wicket AS INT)) > 0 and
COUNT(DISTINCT YEAR(m.[date])) > 2
ORDER BY batting_average DESC;
```

|    | batsman        | total_runs | total_out | seasons_played | batting_average |
|----|----------------|------------|-----------|----------------|-----------------|
| 1  | KL Rahul       | 2647       | 62        | 7              | 42              |
| 2  | AB de Villiers | 4849       | 114       | 13             | 42              |
| 3  | JP Duminy      | 2029       | 49        | 8              | 41              |
| 4  | CH Gayle       | 4772       | 116       | 12             | 41              |
| 5  | ML Hayden      | 1107       | 27        | 3              | 41              |
| 6  | DA Warner      | 5254       | 126       | 11             | 41              |
| 7  | KS Williamson  | 1619       | 41        | 6              | 39              |
| 8  | LMP Simmons    | 1079       | 27        | 4              | 39              |
| 9  | SE Marsh       | 2477       | 64        | 9              | 38              |
| 10 | OA Shah        | 506        | 13        | 4              | 38              |



## ANCHOR BATTERS



## Hard hitting batters

```
SELECT b.batsman,

SUM(CASE WHEN b.batsman_runs IN (4,6) THEN b.batsman_runs ELSE
0 END) AS boundary_runs , SUM(b.batsman_runs) AS total_runs,

COUNT(DISTINCT YEAR(m.[date])) AS seasons_played,

ROUND(CAST(SUM(CASE WHEN b.batsman_runs IN (4,6) THEN
b.batsman_runs ELSE 0 END) AS FLOAT)/SUM(b.batsman_runs) * 100,
2)

AS boundary_percentage

FROM IPL_Ball b

JOIN IPL_matches m

ON b.id = m.id

GROUP BY b.batsman

HAVING COUNT(DISTINCT YEAR(m.[date])) > 2 AND

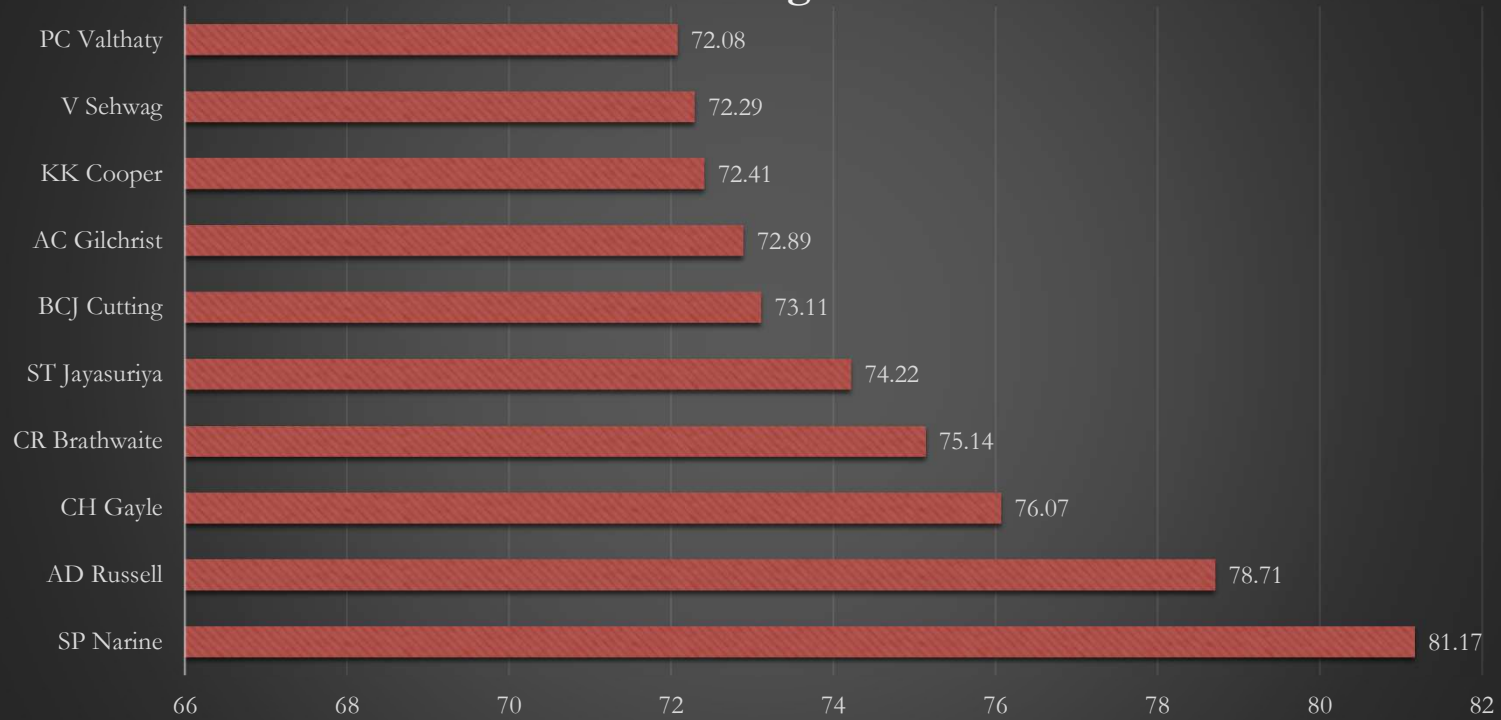
SUM(b.batsman_runs)>100

ORDER BY boundary_percentage DESC;
```

|    | batsman       | boundary_runs | total_runs | seasons_played | boundary_percentage |
|----|---------------|---------------|------------|----------------|---------------------|
| 1  | SP Narine     | 724           | 892        | 9              | 81.17               |
| 2  | AD Russell    | 1194          | 1517       | 8              | 78.71               |
| 3  | CH Gayle      | 3630          | 4772       | 12             | 76.07               |
| 4  | CR Brathwaite | 136           | 181        | 4              | 75.14               |
| 5  | ST Jayasuriya | 570           | 768        | 3              | 74.22               |
| 6  | BCJ Cutting   | 174           | 238        | 5              | 73.11               |
| 7  | AC Gilchrist  | 1508          | 2069       | 6              | 72.89               |
| 8  | KK Cooper     | 84            | 116        | 3              | 72.41               |
| 9  | V Sehwag      | 1972          | 2728       | 8              | 72.29               |
| 10 | PC Valthaty   | 364           | 505        | 4              | 72.08               |



## Hard hitting batters



BOWLERS



# Types of Bowlers

---

- Economical Bowler**

Concedes fewer runs per over and maintains pressure on the batsmen.

- Wicket-Taking Bowler**

Takes wickets frequently, breaks partnerships, and creates pressure on the batting side.

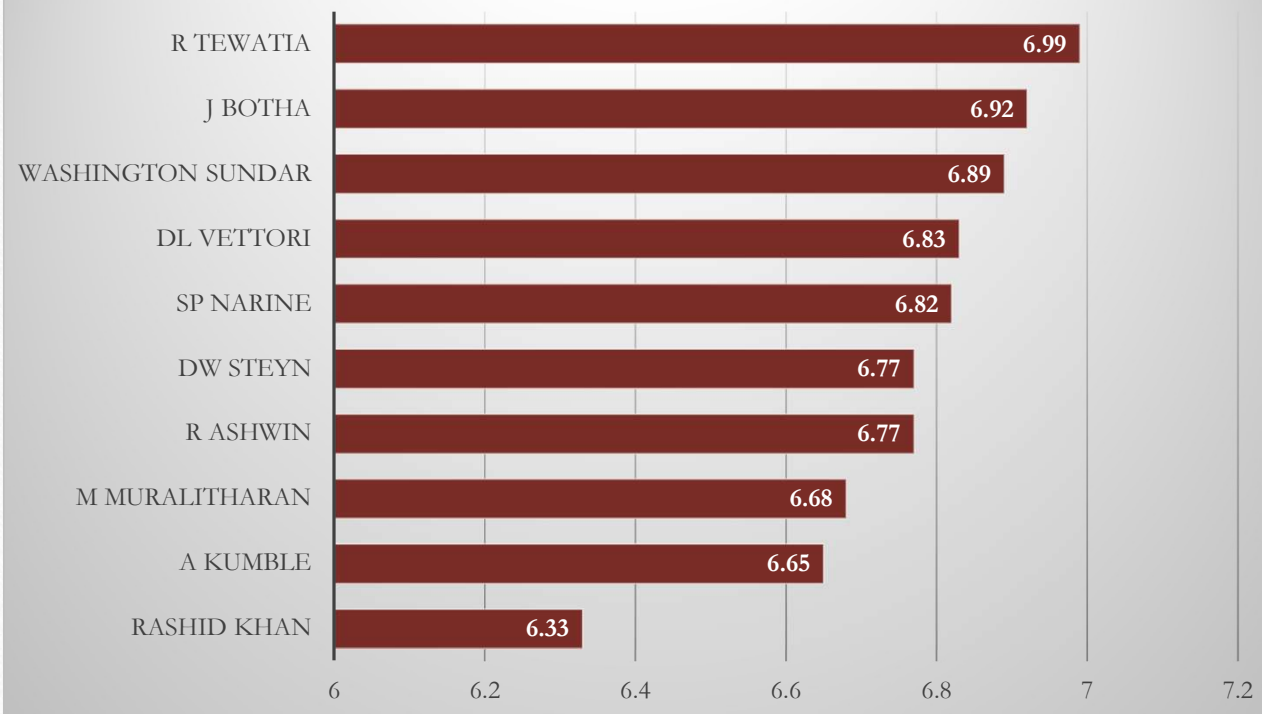
## Economical bowlers

```
select bowler, sum(total_runs) as  
run_conceded , (count(ball)/6) as  
[total over],  
  
cast(round(sum(total_runs)/(count(ball)/6.0),2) as decimal(5,2))  
  
as economy  
  
from IPL_Ball  
  
group by bowler  
  
having count(ball)>=500  
  
order by economy
```

|    | bowler            | run_conceded | total over | economy |
|----|-------------------|--------------|------------|---------|
| 1  | Rashid Khan       | 1573         | 248        | 6.33    |
| 2  | A Kumble          | 1089         | 163        | 6.65    |
| 3  | M Muralitharan    | 1755         | 262        | 6.68    |
| 4  | R Ashwin          | 3756         | 554        | 6.77    |
| 5  | DW Steyn          | 2568         | 379        | 6.77    |
| 6  | SP Narine         | 3208         | 470        | 6.82    |
| 7  | DL Vettori        | 894          | 130        | 6.83    |
| 8  | Washington Sundar | 758          | 110        | 6.89    |
| 9  | J Botha           | 818          | 118        | 6.92    |
| 10 | R Tewatia         | 684          | 97         | 6.99    |



## Economical bowlers



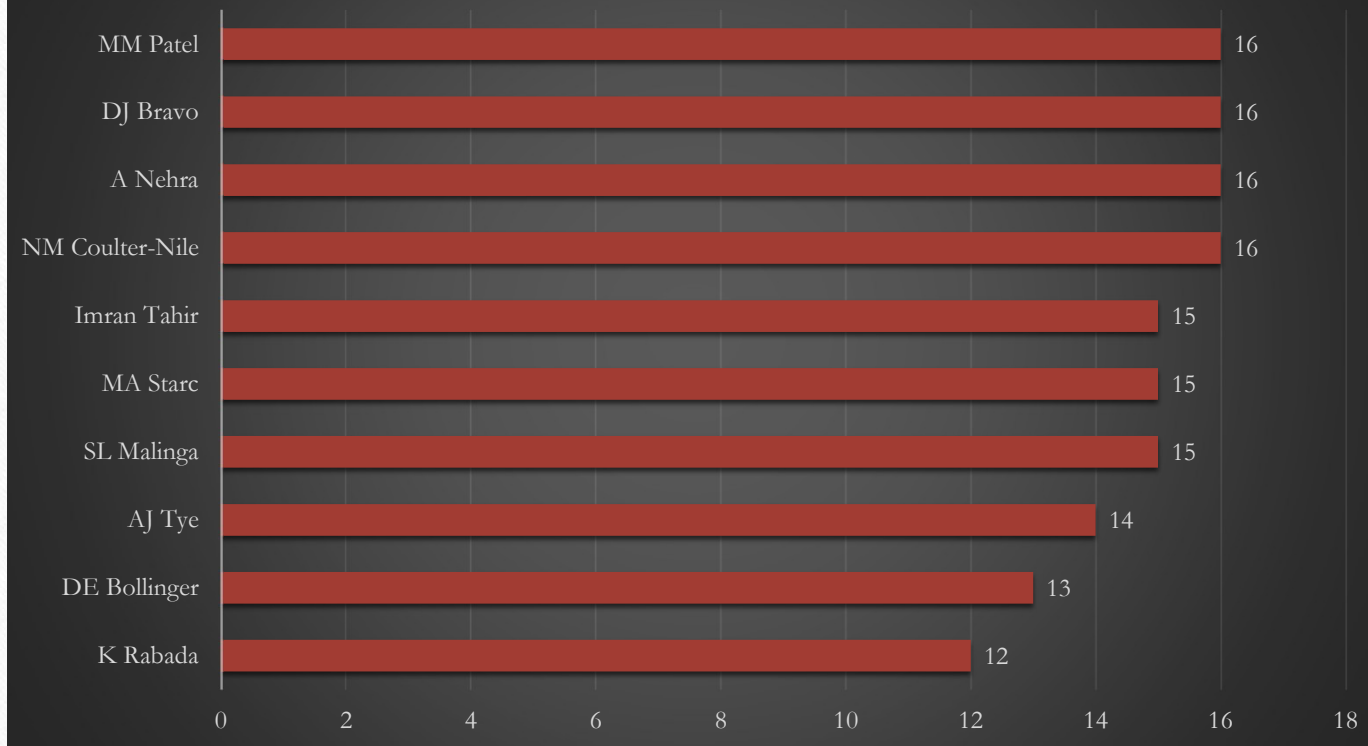
## Wicket taking bowlers

```
select bowler,  
SUM(case when is_wicket=1 then 1 else 0  
END) AS wicket,  
count(ball) as total_bowl,  
count(ball)/SUM(case when is_wicket=1 then  
1 else 0 END) as bowling_strike_rate  
from IPL_Ball  
group by bowler  
HAVING SUM(CASE WHEN is_wicket=1 THEN 1  
ELSE 0 END) > 0 and count(ball)>500  
order by bowling_strike_rate
```

|    | bowler          | wicket | total_bowl | bowling_strike_rate |
|----|-----------------|--------|------------|---------------------|
| 1  | K Rabada        | 66     | 840        | 12                  |
| 2  | DE Bollinger    | 43     | 600        | 13                  |
| 3  | AJ Tye          | 45     | 645        | 14                  |
| 4  | SL Malinga      | 188    | 2974       | 15                  |
| 5  | MA Starc        | 39     | 612        | 15                  |
| 6  | Imran Tahir     | 83     | 1314       | 15                  |
| 7  | NM Coulter-Nile | 45     | 751        | 16                  |
| 8  | A Nehra         | 121    | 1974       | 16                  |
| 9  | DJ Bravo        | 175    | 2846       | 16                  |
| 10 | MM Patel        | 82     | 1382       | 16                  |



## Wicket taking bowlers



# All-Rounders

Players who are skilled in both **batting and bowling**, providing flexibility and multiple contributions to the team.

## All-Rounders

```
SELECT b.batsman AS player_name,b. batting_strike_rate,bw.bowling_strike_rate

from

(select batsman,count(*) as ball_face,

cast(round((SUM(batsman_runs) * 100.0 / COUNT(batsman)), 2) AS DECIMAL(5,2))

as batting_strike_rate

from IPL_Ball

group by batsman

having count(*)>500 ) as b

join

(select bowler ,COUNT(ball) as bowled,

count(ball)/SUM(case when is_wicket=1 then 1 else 0 END) as

bowling_strike_rate

from IPL_Ball

group by bowler

having count(ball)>300) as bw

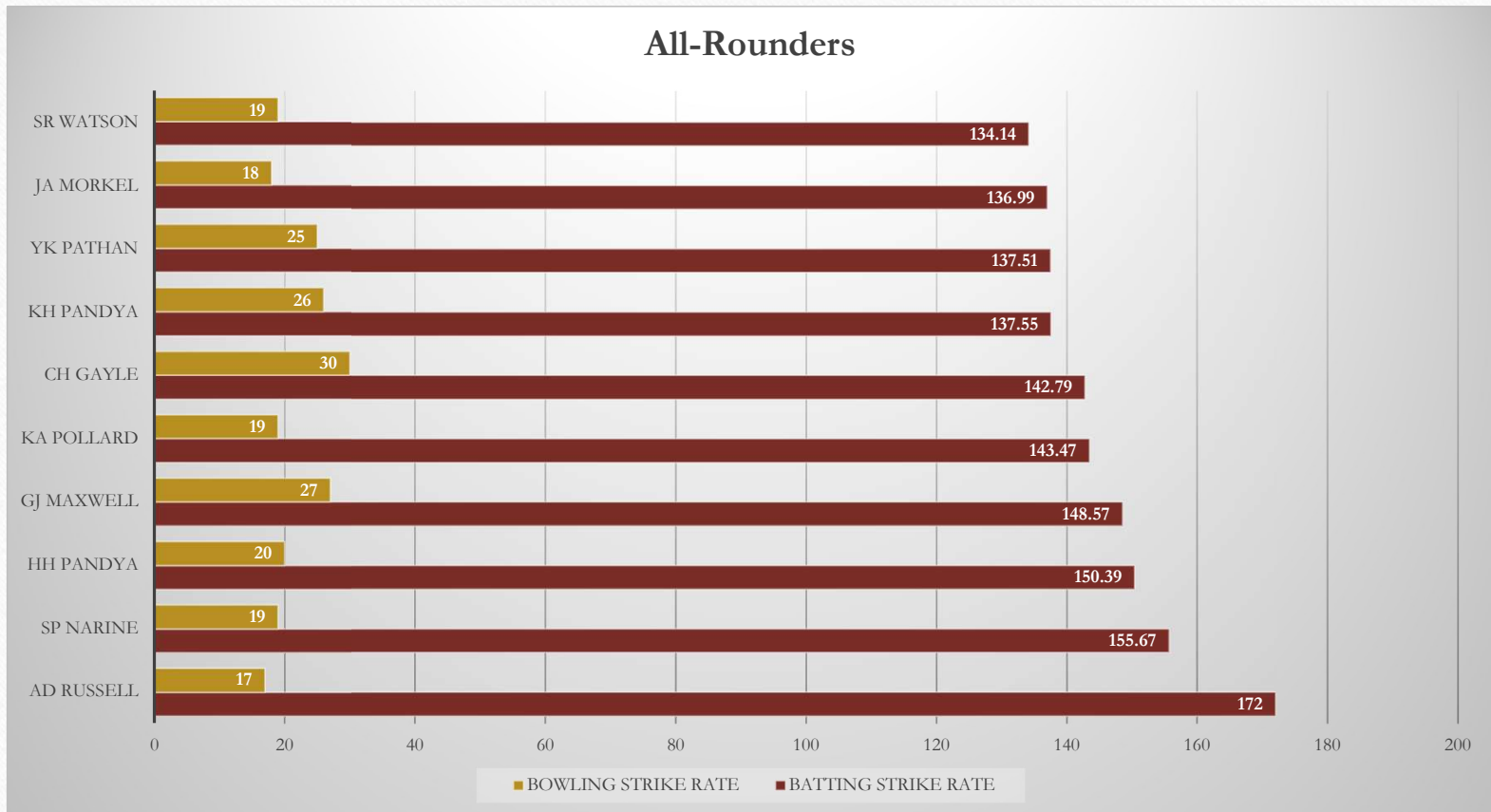
on b.batsman=bw. bowler

order by  batting_strike_rate desc,bowling_strike_rate asc;
```

|    | player_name | batting_strike_rate | bowling_strike_rate |
|----|-------------|---------------------|---------------------|
| 1  | AD Russell  | 172.00              | 17                  |
| 2  | SP Narine   | 155.67              | 19                  |
| 3  | HH Pandya   | 150.39              | 20                  |
| 4  | GJ Maxwell  | 148.57              | 27                  |
| 5  | KA Pollard  | 143.47              | 19                  |
| 6  | CH Gayle    | 142.79              | 30                  |
| 7  | KH Pandya   | 137.55              | 26                  |
| 8  | YK Pathan   | 137.51              | 25                  |
| 9  | JA Morkel   | 136.99              | 18                  |
| 10 | SR Watson   | 134.14              | 19                  |



## All-Rounders



# Wicket-keepers

Players responsible for **catching, stumping, and supporting the team in batting**, often contributing aggressively to the score.

## Wicket-keepers

```
with wk as ( select fielder as wicket_keeper, sum(case when
dismissal_kind = 'stumped' then 1 else 0 end)

as stumping, sum(case when dismissal_kind = 'caught' then 1 else 0 end) as
catches,

sum(case when dismissal_kind in ('stumped','caught') then 1 else 0 end) as
total_dismissals from IPL_Ball

where dismissal_kind in ('stumped', "caught") group by fielder

having sum(case when dismissal_kind = 'stumped' then 1 else 0 end) > 5 and
sum(case when dismissal_kind = 'caught' then 1 else 0 end) > 5 ),

sr as (select batsman, round(sum(batsman_runs) * 100.0 / count(*), 2) as
strike_rate from IPL_Ball

group by batsman)

select wk.wicket_keeper, wk.stumping, wk.catches,wk.total_dismissals,

cast(sr.strike_rate as decimal(5,2)) as batting_strike_rate

from wk

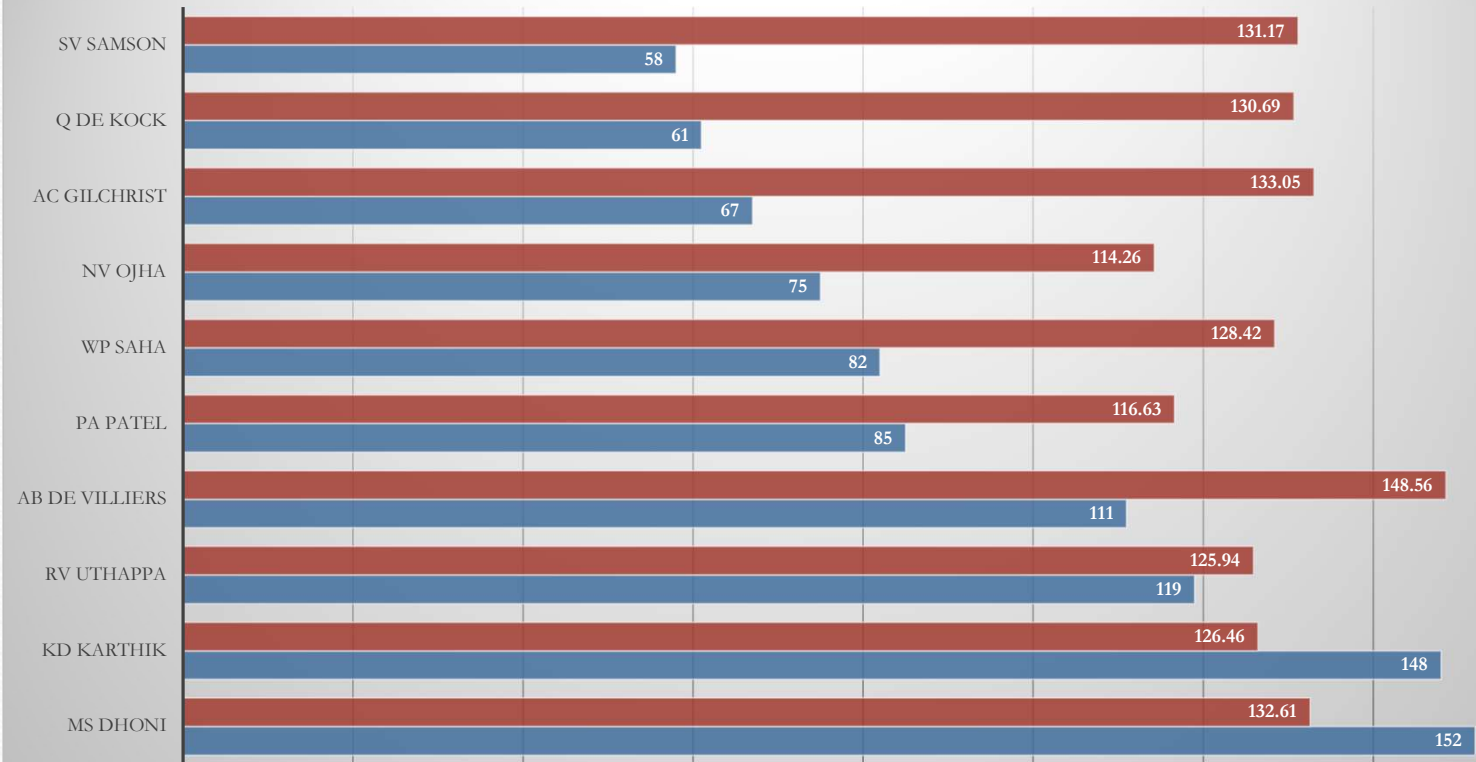
left join sr on wk.wicket_keeper = sr.batsman

order by wk.total_dismissals desc;
```

|    | wicket_keeper  | stumping | catches | total_dismissals | batting_strike_rate |
|----|----------------|----------|---------|------------------|---------------------|
| 1  | MS Dhoni       | 39       | 113     | 152              | 132.61              |
| 2  | KD Karthik     | 30       | 118     | 148              | 126.46              |
| 3  | RV Uthappa     | 32       | 87      | 119              | 125.94              |
| 4  | AB de Villiers | 8        | 103     | 111              | 148.56              |
| 5  | PA Patel       | 16       | 69      | 85               | 116.63              |
| 6  | WP Saha        | 20       | 62      | 82               | 128.42              |
| 7  | NV Ojha        | 10       | 65      | 75               | 114.26              |
| 8  | AC Gilchrist   | 16       | 51      | 67               | 133.05              |
| 9  | Q de Kock      | 12       | 49      | 61               | 130.69              |
| 10 | SV Samson      | 6        | 52      | 58               | 131.17              |



## Wicket-keepers



Extra-Qus

1. Get the count of cities that have hosted an IPL match

```
select count( distinct city) as cities
from IPL_matches
```

Ans - :

**cities**

33

2. Create table deliveries\_v02 with all the columns of the table 'deliveries' and an additional column ball\_result containing values boundary, dot or other depending on the total\_run

```
SELECT *, CASE WHEN batsman_runs >= 4 THEN
'boundary'
WHEN total_runs = 0 THEN 'dot'
ELSE 'other' END AS ball_result
INTO deliveries_v02
FROM IPL_Ball;
```

|    | ker   | bowler    | batsman_runs | extra_runs | total_runs | is_wicket | dismissal_kind | player_dismissed | fielder | extras_type | batting_team          | bowling_team                | ball_result |
|----|-------|-----------|--------------|------------|------------|-----------|----------------|------------------|---------|-------------|-----------------------|-----------------------------|-------------|
| 1  | ulium | AA Nofike | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 2  | ting  | AA Nofike | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 3  | ting  | Z Khan    | 0            | 0          | 0          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | dot         |
| 4  | ting  | Z Khan    | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 5  | ulium | Z Khan    | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 6  | ting  | Z Khan    | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 7  | ulium | Z Khan    | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 8  | ting  | Z Khan    | 1            | 0          | 1          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | other       |
| 9  | ting  | JH Kallis | 0            | 0          | 0          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | dot         |
| 10 | ting  | JH Kallis | 0            | 0          | 0          | 0         | NA             | NA               | NA      | NA          | Kolkata Knight Riders | Royal Challengers Bangalore | dot         |



3. Write a query to fetch the total number of boundaries and dot balls from the deliveries\_v02 table.

```
SELECT

SUM(CASE WHEN ball_result = 'boundary' THEN 1 ELSE 0
END) AS total_boundaries,

SUM(CASE WHEN ball_result = 'dot' THEN 1 ELSE 0 END)
AS total_dot_balls

FROM deliveries_v02;
```

|   | total_boundaries | total_dot_balls |
|---|------------------|-----------------|
| 1 | 30870            | 67841           |

4. Write a query to fetch the total number of boundaries scored by each team from the deliveries\_v02 table and order it in descending order of the number of boundaries scored.

```
SELECT batting_team,

SUM(CASE WHEN ball_result = 'boundary' THEN 1 ELSE 0
END) AS total_boundaries

FROM deliveries_v02

group by batting_team

order by total_boundaries desc;
```

|    | batting_team                | total_boundaries |
|----|-----------------------------|------------------|
| 1  | Mumbai Indians              | 4045             |
| 2  | Royal Challengers Bangalore | 3734             |
| 3  | Kings XI Punjab             | 3705             |
| 4  | Kolkata Knight Riders       | 3648             |
| 5  | Chennai Super Kings         | 3429             |
| 6  | Rajasthan Royals            | 2986             |
| 7  | Delhi Daredevils            | 2961             |
| 8  | Sunrisers Hyderabad         | 2264             |
| 9  | Deccan Chargers             | 1362             |
| 10 | Pune Warriors               | 723              |

5. Write a query to fetch the total number of dot balls bowled by each team and order it in descending order of the total number of dot balls bowled.

```
SELECT bowling_team,  
SUM(CASE WHEN ball_result = 'dot' THEN 1 ELSE 0 END)  
AS total_boundaries  
FROM deliveries_v02  
group by bowling_team  
order by total_boundaries desc;
```

6. Write a query to fetch the total number of dismissals by dismissal kinds where dismissal kind is not NA

```
select dismissal_kind, count(dismissal_kind)  
as[dismissal_kind] from IPL_Ball  
where dismissal_kind!='na'  
group by dismissal_kind  
order by dismissal_kind
```

|    | bowling_team                | total_boundaries |
|----|-----------------------------|------------------|
| 1  | Mumbai Indians              | 8714             |
| 2  | Royal Challengers Bangalore | 7955             |
| 3  | Kolkata Knight Riders       | 7894             |
| 4  | Kings XI Punjab             | 7679             |
| 5  | Chennai Super Kings         | 7593             |
| 6  | Rajasthan Royals            | 6665             |
| 7  | Delhi Daredevils            | 6520             |
| 8  | Sunrisers Hyderabad         | 5248             |
| 9  | Deccan Chargers             | 3306             |
| 10 | Pune Warriors               | 1900             |

|   | dismissal_kind        | dismisal_kind |
|---|-----------------------|---------------|
| 1 | bowled                | 1700          |
| 2 | caught                | 5743          |
| 3 | caught and bowled     | 269           |
| 4 | hit wicket            | 12            |
| 5 | lbw                   | 571           |
| 6 | obstructing the field | 2             |
| 7 | retired hurt          | 11            |
| 8 | run out               | 893           |
| 9 | stumped               | 294           |



7. Write a query to get the top 5 bowlers who conceded maximum extra runs from the deliveries table

```
select top 5 bowler, sum(extra_runs) as [extra run]
from deliveries_v02
group by bowler
order by [extra run] desc;
```

|   | bowler     | extra run |
|---|------------|-----------|
| 1 | SL Malinga | 293       |
| 2 | P Kumar    | 236       |
| 3 | UT Yadav   | 226       |
| 4 | DJ Bravo   | 210       |
| 5 | B Kumar    | 201       |

8. Write a query to create a table named deliveries\_v03 with all the columns of deliveries\_v02 table and two additional column (named venue and match\_date) of venue and date from table matches

```
SELECT d.*, m.venue, m.date AS match_date
INTO deliveries_v03
FROM deliveries_v02 d
JOIN IPL_matches m
ON d.id = m.id;
```



9. Write a query to fetch the total runs scored for each venue and order it in the descending order of total runs scored

```
select venue, sum(total_runs) as [runs]
from deliveries_v03
group by venue
order by runs desc;
```

|    | venue                                      | runs  |
|----|--|-------|
| 1  | Eden Gardens                               | 23658 |
| 2  | Wankhede Stadium                           | 23390 |
| 3  | Feroz Shah Kotla                           | 22947 |
| 4  | M Chinnaswamy Stadium                      | 20237 |
| 5  | Rajiv Gandhi International Stadium, Uppal  | 19484 |
| 6  | MA Chidambaram Stadium, Chepauk            | 17821 |
| 7  | Sawai Mansingh Stadium                     | 14264 |
| 8  | Punjab Cricket Association Stadium, Mohali | 10987 |
| 9  | Dubai International Cricket Stadium        | 10402 |
| 10 | Sheikh Zayed Stadium                       | 8830  |

10. Write a query to fetch the year-wise total runs scored at Eden Gardens and order it in the descending order of total runs scored

```
.SELECT
YEAR(match_date) AS match_year,
SUM(total_runs) AS total_runs_scored
FROM deliveries_v03
WHERE venue = 'Eden Gardens'
GROUP BY YEAR(match_date)
ORDER BY total_runs_scored DESC;
```

|    | match_year | total_runs_scored |
|----|------------|-------------------|
| 1  | 2018       | 2885              |
| 2  | 2019       | 2651              |
| 3  | 2015       | 2386              |
| 4  | 2013       | 2304              |
| 5  | 2017       | 2194              |
| 6  | 2010       | 2167              |
| 7  | 2016       | 2073              |
| 8  | 2012       | 2012              |
| 9  | 2011       | 1854              |
| 10 | 2008       | 1843              |
| 11 | 2014       | 1289              |

Thank you

**Vishal Desai**

