



# IPL(2008-2022) Cricket Analysis

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# Summary

IPL(Indian Premier League) is a cricket league, where each of the playing teams represents the different cities in India. It follows a franchise based model similar to other professional sports leagues.

This used to happen once in a year and it is also the most expected and loved sports by the Indian peoples.



This analysis is completely based on the performances of each team from 2009-2022, there might be changes or there might be any new teams added to the league recently. This dataset is from Kaggle.

# Dataset

```
1 select * from ipl_matches
2 limit 20
```

	ID	City	Date	Season	MatchNumber	Team1	Team2	Venue	TossWinner	TossDecision	SuperOver	WinningTeam
▶	1312200	Ahmedabad	29-05-2022	2022	Final	Rajasthan Royals	Gujarat Titans	Narendra Modi Stadium, Ahmedabad	Rajasthan Royals	bat	N	Gujarat Titans
	1312199	Ahmedabad	27-05-2022	2022	Qualifier 2	Royal Challengers Bangalore	Rajasthan Royals	Narendra Modi Stadium, Ahmedabad	Rajasthan Royals	field	N	Rajasthan Royals
	1312198	Kolkata	25-05-2022	2022	Eliminator	Royal Challengers Bangalore	Lucknow Super Giants	Eden Gardens, Kolkata	Lucknow Super Giants	field	N	Royal Challengers Ba
	1312197	Kolkata	24-05-2022	2022	Qualifier 1	Rajasthan Royals	Gujarat Titans	Eden Gardens, Kolkata	Gujarat Titans	field	N	Gujarat Titans
	1304116	Mumbai	22-05-2022	2022	70	Sunrisers Hyderabad	Punjab Kings	Wankhede Stadium, Mumbai	Sunrisers Hyderabad	bat	N	Punjab Kings
	1304115	Mumbai	21-05-2022	2022	69	Delhi Capitals	Mumbai Indians	Wankhede Stadium, Mumbai	Mumbai Indians	field	N	Mumbai Indians
	1304114	Mumbai	20-05-2022	2022	68	Chennai Super Kings	Rajasthan Royals	Brabourne Stadium, Mumbai	Chennai Super Kings	bat	N	Rajasthan Royals
	1304113	Mumbai	19-05-2022	2022	67	Gujarat Titans	Royal Challengers Bangalore	Wankhede Stadium, Mumbai	Gujarat Titans	bat	N	Royal Challengers Ba
	1304112	Navi Mumbai	18-05-2022	2022	66	Lucknow Super Giants	Kolkata Knight Riders	Dr DY Patil Sports Academy, Mumbai	Lucknow Super Giants	bat	N	Lucknow Super Giant
	1304111	Mumbai	17-05-2022	2022	65	Sunrisers Hyderabad	Mumbai Indians	Wankhede Stadium, Mumbai	Mumbai Indians	field	N	Sunrisers Hyderabad
	1304110	Navi Mumbai	16-05-2022	2022	64	Delhi Capitals	Punjab Kings	Dr DY Patil Sports Academy, Mumbai	Punjab Kings	field	N	Delhi Capitals
	1304109	Mumbai	15-05-2022	2022	63	Rajasthan Royals	Lucknow Super Giants	Brabourne Stadium, Mumbai	Rajasthan Royals	bat	N	Rajasthan Royals
	1304108	Mumbai	15-05-2022	2022	62	Chennai Super Kings	Gujarat Titans	Wankhede Stadium, Mumbai	Chennai Super Kings	bat	N	Gujarat Titans
	1304107	Pune	14-05-2022	2022	61	Kolkata Knight Riders	Sunrisers Hyderabad	Maharashtra Cricket Association St...	Kolkata Knight Riders	bat	N	Kolkata Knight Riders
	1304106	Mumbai	13-05-2022	2022	60	Punjab Kings	Royal Challengers Bangalore	Brabourne Stadium, Mumbai	Royal Challengers Ba...	field	N	Punjab Kings
	1304105	Mumbai	12-05-2022	2022	59	Chennai Super Kings	Mumbai Indians	Wankhede Stadium, Mumbai	Mumbai Indians	field	N	Mumbai Indians
	1304104	Navi Mumbai	11-05-2022	2022	58	Rajasthan Royals	Delhi Capitals	Dr DY Patil Sports Academy, Mumbai	Delhi Capitals	field	N	Delhi Capitals
	1304103	Pune	10-05-2022	2022	57	Gujarat Titans	Lucknow Super Giants	Maharashtra Cricket Association St...	Gujarat Titans	bat	N	Gujarat Titans
	1304102	Navi Mumbai	09-05-2022	2022	56	Kolkata Knight Riders	Mumbai Indians	Dr DY Patil Sports Academy, Mumbai	Mumbai Indians	field	N	Kolkata Knight Riders

# How many teams played in each season?

```
with cte as
(
  select season, team1 from ipl_matches
  union
  select season, team2 from ipl_matches
)
select Season, count(team1) as No_of_teams
from cte
group by season
order by season
```

Season	No_of_teams
2008	8
2009	8
2010	8
2011	10
2012	9
2013	9
2014	8
2015	8
2016	8
2017	8
2018	8
2019	8
2020	8
2021	8
2022	10

# What was the total number of matches won by a team?

```
select winningTeam as Teams, count(WinningTeam) as Total_wins from ipl_matches
group by WinningTeam
order by Total_wins desc;
```

Teams	Wins
Mumbai Indians	129
Chennai Super Kings	121
Kolkata Knight Riders	113
Royal Challengers Bangalore	107
Rajasthan Royals	94
Kings XI Punjab	85
Sunrisers Hyderabad	74
Delhi Daredevils	67
Delhi Capitals	33
Deccan Chargers	29
Punjab Kings	13
Gujarat Lions	13
Gujarat Titans	12
Pune Warriors	12
Rising Pune Supergiant	10
Lucknow Super Giants	9
Kochi Tuskers Kerala	6
Rising Pune Supergiants	5

# Generate an overall point table for each team.

```
1 • with Win as(select team1 as Teams,
2   case when team1=winningTeam then 1 else 0
3   end as Points
4   from ipl_matches
5   union all
6   select team2,
7   case when team2=Winningteam then 1 else 0
8   end as Points
9   from ipl_matches)
10
11 select teams,count(Teams) as Total_Matches_played ,sum(points) as Total_wins, (count(teams) - sum(points)) as Total_losses from Win
12 group by teams
13 order by Total_wins desc
```

Teams	Total_matches_played	Total_wins	Total_losses
Mumbai Indians	227	129	98
Chennai Super Kings	207	121	86
Kolkata Knight Riders	219	113	106
Royal Challengers Bangalore	220	107	113
Rajasthan Royals	187	94	93
Kings XI Punjab	186	85	101
Sunrisers Hyderabad	148	74	74
Delhi Daredevils	158	67	91
Delhi Capitals	60	33	27
Deccan Chargers	75	29	46
Punjab Kings	28	13	15
Gujarat Lions	29	13	16
Gujarat Titans	16	12	4
Pune Warriors	45	12	33
Rising Pune Supergiant	16	10	6
Lucknow Super Giants	15	9	6
Kochi Tuskers Kerala	14	6	8
Rising Pune Supergiants	14	5	9



# How will you display the point table of a particular season?

```
delimiter $$
create procedure Points_table(In year_ int)
begin
with Points_table as(select team1 as Teams,
case when team1=winningTeam then 1 else 0
end as Points
from ipl_matches
where season=year_
union all
select team2,
case when team2=Winningteam then 1 else 0
end as Points
from ipl_matches
where season=year_)

select teams as Teams,count(Teams) as Total_Matches_played ,sum(points) as Total_wins,
(count(teams) - sum(points)) as Total_losses from Points_table
group by teams
order by Total_wins desc;
end $$
delimiter ;
```

```
call points_table(2021);
```

Teams	Total_Matches_played	Total_wins	Total_losses
Chennai Super Kings	16	11	5
Delhi Capitals	15	9	6
Royal Challengers Bangalore	15	9	6
Kolkata Knight Riders	17	9	8
Mumbai Indians	14	7	7
Punjab Kings	14	6	8
Rajasthan Royals	14	5	9
Sunrisers Hyderabad	13	3	10

# Find number of matches by the team who won the toss and the match simultaneously?

```
with toss_win as
(select
  winningteam,
  case
    when winningteam = Tosswinner then 1 else 0
  end as W from ipl_matches)
select WinningTeam as Toss_Winner, sum(w) as No_of_matches_won
from toss_win
group by Toss_winner
order by no_of_matches_won desc
```

Toss_Winner	No_of_matches_won
Mumbai Indians	69
Chennai Super Kings	68
Kolkata Knight Riders	64
Royal Challengers Bangalore	52
Rajasthan Royals	48
Kings XI Punjab	35
Delhi Daredevils	35
Sunrisers Hyderabad	34
Delhi Capitals	19
Deccan Chargers	19
Gujarat Lions	10
Gujarat Titans	7
Rising Pune Supergiant	5
Punjab Kings	4
Lucknow Super Giants	4
Kochi Tuskers Kerala	4
Rising Pune Supergiants	3
Pune Warriors	3



# Find the number of matches won by the First and second batting with respect to venue?

```
select * from ipl_matches;
with CTE as
(select
team1,team2,season,venue, case
    when (team1=Tosswinner and tossdecision = "bat" and WinningTeam = team1) then "First Batting"
    when (team2=Tosswinner and TossDecision = "bat" and WinningTeam = team2) then "First Batting"
    when (team1=Tosswinner and tossdecision = "field" and winningTeam = Team2) then "First Batting"
    when (team2=Tosswinner and TossDecision = "field" and winningteam = team1) then "First Batting" end as First_batting,
case
    when (team2=Tosswinner and TossDecision = "field" and WinningTeam = team2) then "Second Batting"
    when (team1=Tosswinner and tossdecision = "bat" and winningTeam = Team2) then "Second Batting"
    when (team1=Tosswinner and tossdecision = "field" and winningTeam = Team1) then "Second Batting"
    when (team2=Tosswinner and TossDecision = "bat" and WinningTeam = team2) then "Second Batting"
end As Second_batting
from ipl_matches)
select Venue as Venue,count(First_batting) as First_batting_Wins, count(Second_batting) as Second_batting_Wins from CTE
group by venue
order by first_batting_wins desc
```

Venue	First_batting_Wins	Second_batting_Wins
Wankhede Stadium	47	53
MA Chidambaram Stadium	39	23
M Chinnaswamy Stadium	33	42
Eden Gardens	31	40
Feroz Shah Kotla	27	32
Rajiv Gandhi International Stadium	27	30
Punjab Cricket Association IS Bindra Stadium	24	31
Dubai International Cricket Stadium	21	21
Maharashtra Cricket Association Stadium	18	17
Dr DY Patil Sports Academy	17	18
Sawai Mansingh Stadium	15	24
Brabourne Stadium	14	12
Sheikh Zayed Stadium	11	17
Sharjah Cricket Stadium	10	17
Subrata Roy Sahara Stadium	10	11
Arun Jaitley Stadium	8	9
Kingsmead	8	6
Dr. Y.S. Rajasekhara Reddy ACA-VDCA Cri...	6	8
Sardar Patel Stadium, Motera	6	3
Himachal Pradesh Cricket Association Stadium	5	4
Newlands	4	2
SuperSport Park	4	8
Barabati Stadium	4	3
Zayed Cricket Stadium, Abu Dhabi	3	5

# Find the toss and match winning percentage of the teams?

```
with cte as(
select Teams,sum(case when Teams = WinningTeam then 1 else 0 end ) as Total_Wins,
        sum(case when Teams=winningteam and Teams=Toss_winners then 1 else 0 End )as Toss_and_match_wins
from
(select team1 as Teams,tosswinner as Toss_winners, Winningteam from ipl_matches
union all
select team2,tosswinner,WinningTeam from ipl_matches) As Team
group by Teams
)

select Teams,Total_wins,Toss_and_match_wins,
       round((Toss_and_match_wins/Total_wins)*100,2) As Toss_and_match_win_percentage from cte ;
```

Teams	Total_wins	Toss_and_match_wins	Toss_and_match_win_percent
Rajasthan Royals	94	48	51.06
Royal Challengers Bangalore	107	52	48.60
Sunrisers Hyderabad	74	34	45.95
Delhi Capitals	33	19	57.58
Chennai Super Kings	121	68	56.20
Gujarat Titans	12	7	58.33
Lucknow Super Giants	9	4	44.44
Kolkata Knight Riders	113	64	56.64
Punjab Kings	13	4	30.77
Mumbai Indians	129	69	53.49
Kings XI Punjab	85	35	41.18
Delhi Daredevils	67	35	52.24
Rising Pune Supergiant	10	5	50.00
Gujarat Lions	13	10	76.92
Rising Pune Supergiants	5	3	60.00
Pune Warriors	12	3	25.00
Deccan Chargers	29	19	65.52
Kochi Tuskers Kerala	6	4	66.67

# Which venue did conducted most of the matches?

```
select Venue,city, count(Venue) as Total_matches
from ipl_matches
group by venue,city
order by Total_matches desc
```

Venue	city	Total_matches
Wankhede Stadium	Mumbai	103
Eden Gardens	Kolkata	79
MA Chidambaram Stadium	Chennai	65
Rajiv Gandhi International Stadium	Hyderabad	63
M Chinnaswamy Stadium	Bangalore	62
Feroz Shah Kotla	Delhi	59
Punjab Cricket Association IS Bindra Stadium	Chandigarh	56
Sawai Mansingh Stadium	Jaipur	47
Maharashtra Cricket Association Stadium	Pune	35
Dubai International Cricket Stadium	NA	30
Dr DY Patil Sports Academy	Mumbai	28
Brabourne Stadium	Mumbai	27
Sheikh Zayed Stadium	Abu Dhabi	27
Sharjah Cricket Stadium	NA	18
Arun Jaitley Stadium	Delhi	17
Subrata Roy Sahara Stadium	Pune	16
Kingsmead	Durban	15
M Chinnaswamy Stadium	Bengaluru	14
Dubai International Cricket Stadium	Dubai	13

# What is the chase and defeat percentage of the teams?

```
with CTE as(
  select WinningTeam,
  sum(case when Wonby = "Wickets" then 1 end) as Chase,
  sum(case when Wonby = "Runs" then 1 end) as Defend
  from ipl_matches
  group by WinningTeam)

select WinningTeam,Chase,Defend, Round(chase*100/chase-defend,2) as Chase_Percentage,
      Round(defend*100/chase-defend,2) as Defend_Percentage from cte
```

WinningTeam	Chase	Defend	Chase_Percentage	Defend_Percentage
Gujarat Titans	8	4	96.00	46.00
Rajasthan Royals	57	37	63.00	27.91
Royal Challengers Bangalore	59	48	52.00	33.36
Punjab Kings	6	7	93.00	109.67
Mumbai Indians	63	66	34.00	38.76
Lucknow Super Giants	2	7	93.00	343.00
Sunrisers Hyderabad	38	36	64.00	58.74
Delhi Capitals	20	13	87.00	52.00
Kolkata Knight Riders	68	45	55.00	21.18
Chennai Super Kings	60	61	39.00	40.67
Kings XI Punjab	45	40	60.00	48.89
Delhi Daredevils	42	25	75.00	34.52
Rising Pune Supergiant	5	5	95.00	95.00
Gujarat Lions	12	1	99.00	7.33
Rising Pune Supergiants	3	2	98.00	64.67
Pune Warriors	6	6	94.00	94.00
Deccan Chargers	11	18	82.00	145.64
Kochi Tuskers Kerala	4	2	98.00	48.00

# Who was awarded as player of the match for most of the times?

```
SELECT * FROM ipl_data.ipl_matches;  
select player_of_match, count(player_of_match) as No_of_times  
from ipl_matches  
group by player_of_match  
order by no_of_times desc
```

player_of_match	No_of_times
AB de Villiers	24
CH Gayle	22
DA Warner	18
RG Sharma	18
MS Dhoni	17
SR Watson	16
YK Pathan	15
KA Pollard	14
SK Raina	14
V Kohli	13
G Gambhir	13
AD Russell	12
SP Narine	12
A Mishra	12
AM Rahane	12
MEK Hussey	12
S Dhawan	11
KL Rahul	11
RA Jadeja	11
DR Smith	11



# Who got most man of the matches in respective seasons?

```
select season,player_of_match,count(player_of_match) as matches from ipl_matches
group by season,player_of_match
order by matches desc,Season
```

season	player_of_match	matches
2011	CH Gayle	6
2008	SE Marsh	5
2012	CH Gayle	5
2013	MEK Hussey	5
2016	V Kohli	5
2008	YK Pathan	4
2008	SR Watson	4
2010	SR Tendulkar	4
2013	A Mishra	4
2014	GJ Maxwell	4
2015	DA Warner	4
2016	AB de Villiers	4
2016	RG Sharma	4
2018	Rashid Khan	4
2019	AD Russell	4
2021	RD Gaikwad	4
2022	Kuldeep Yadav	4
2010	A Symonds	3
2010	JH Kallis	3



# What is the overall win percentage of the individual teams?

```
SELECT * FROM ipl_data.ipl_matches;

with CTE as(
select team1 as Teams,WinningTeam from ipl_matches
union all
select team2,WinningTeam from ipl_matches)
select Teams,count(teams) as Total_matches_played, sum(case when Teams=WinningTeam then 1 else 0 end) as Total_Wins,
      sum(case when Teams<>WinningTeam then 1 else 0 end) as Total_losses,
      round(sum(case when Teams=WinningTeam then 1 else 0 end)*100/count(teams),2) AS Win_percentage

from CTE
group by Teams
order by Total_matches_played desc ,Win_Percentage desc
```

Teams	Total_matches_played	Total_Wins	Total_losses	Win_percentage
Mumbai Indians	227	129	98	56.83
Royal Challengers Bangalore	220	107	113	48.64
Kolkata Knight Riders	219	113	106	51.60
Chennai Super Kings	207	121	86	58.45
Rajasthan Royals	187	94	93	50.27
Kings XI Punjab	186	85	101	45.70
Delhi Daredevils	158	67	91	42.41
Sunrisers Hyderabad	148	74	74	50.00
Deccan Chargers	75	29	46	38.67
Delhi Capitals	60	33	27	55.00
Pune Warriors	45	12	33	26.67
Gujarat Lions	29	13	16	44.83
Punjab Kings	28	13	15	46.43
Gujarat Titans	16	12	4	75.00
Rising Pune Supergiant	16	10	6	62.50
Lucknow Super Giants	15	9	6	60.00
Kochi Tuskers Kerala	14	6	8	42.86
Rising Pune Supergiants	14	5	9	35.71