IPL Data Analysis

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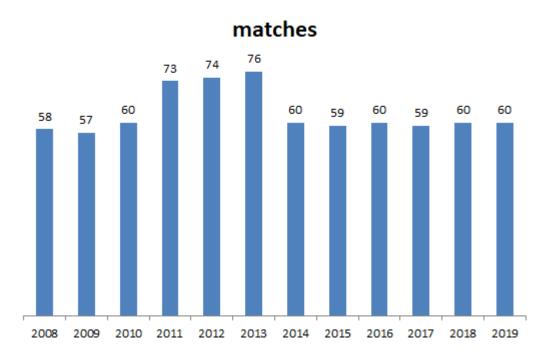
Data

The analysis is based on the most famous cricket league in the world- Indian Premier League (IPL). The data is based on ball-by-ball and match record of 11 seasons (2008-2018). The data is available in tabular format (csv file).

The following analysis is done using Python programming and Tableau. Please check the attachment of python notebook for the reference.

Team Stats

Total Matches per Season

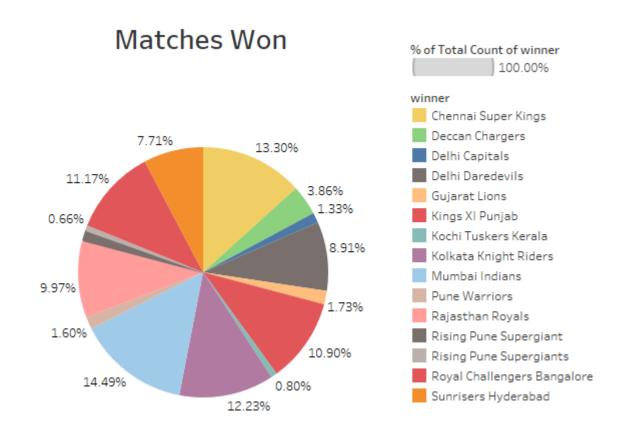


As we can observe that season 2011, 2012, 2013 has more number of matches as compared to other seasons. This is because two additional teams: Pune Warriors India and Kochi Tuskers Kerala were introduced.

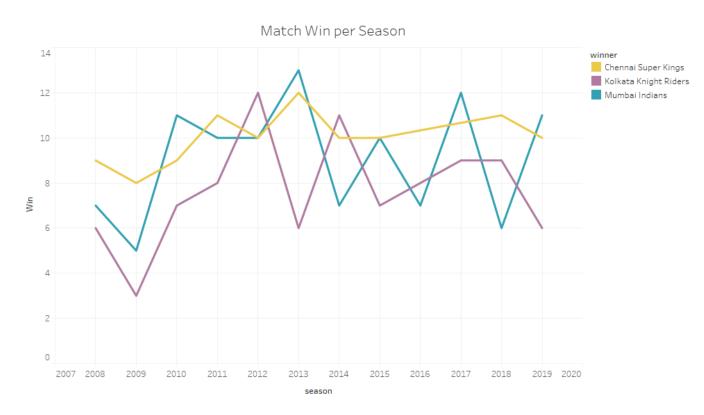
Most Wins

	matches_won
winner	
Mumbai Indians	109
Chennai Super Kings	100
Kolkata Knight Riders	92
Royal Challengers Bangalore	84
Kings XI Punjab	82
Rajasthan Royals	75
Delhi Daredevils	67
Sunrisers Hyderabad	58

Mumbai Indians have won the most matches (109) in the Indian Premier League. To understand better let us visualize the pie chart.



Mumbai Indians, Chennai Super Kings and Kolkata Knight Riders are the most successful teams in the IPL. Now let us check overall performance of these teams in terms of match win per season.



IPL Winners

	team	season
1	Rajasthan Royals	2008
2	Deccan Chargers	2009
3	Chennai Super Kings	2010
4	Chennai Super Kings	2011
5	Kolkata Knight Riders	2012
6	Mumbai Indians	2013
7	Kolkata Knight Riders	2014
8	Mumbai Indians	2015
9	Sunrisers Hyderabad	2016
0	Mumbai Indians	2017
10	Chennai Super Kings	2018
11	Mumbai Indians	2019

Most Titles

	season
team	
Mumbai Indians	4
Chennai Super Kings	3
Kolkata Knight Riders	2
Deccan Chargers	1
Rajasthan Royals	1
Sunrisers Hyderabad	1

Most successful team of the IPL is Mumbai Indians with 4 titles.

IPL Finals Record

	Team	Finals_Played	Won	Lost
0	Chennai Super Kings	8	3	5
1	Mumbai Indians	5	4	1
2	Royal Challengers Bangalore	3	0	3
3	Kolkata Knight Riders	2	2	0
4	Sunrisers Hyderabad	2	1	1
5	Rajasthan Royals	1	1	0
6	Kings XI Punjab	1	0	1
7	Deccan Chargers	1	1	0
8	Rising Pune Supergiant	1	0	1

Chennai Super Kings have played most finals (8) and lost 5 of them. Mumbai Indians have played 5 IPL finals with an excellent win to loss ratio (4:1).

Super Over

	team	Matches	Won	Loss
0	Chennai Super Kings	1	0	1
1	Delhi Capitals	1	1	0
2	Delhi Daredevils	1	0	1
3	Gujarat Lions	1	0	1
4	Kings XI Punjab	2	2	0
5	Kolkata Knight Riders	3	0	3
6	Mumbai Indians	2	2	0
7	Rajasthan Royals	3	2	1
8	Royal Challengers Bangalore	2	1	1
9	Sunrisers Hyderabad	2	1	1

There have been total 9 super over matches in the IPL. Delhi Capitals, Kings XI Punjab and Mumbai Indian have never lost a super over match. While Chennai Super Kings, Delhi Daredevils, Gujarat Lions and Kolkata Knight Riders have never won a super over match.

Player Stats

Most Runs In IPL (2008-2018)

Here are the top 10 highest run getters in Indian Premier League

	batsman_runs
batsman	
V Kohli	5434
SK Raina	5415
RG Sharma	4914
DA Warner	4741
S Dhawan	4632
CH Gayle	4560
MS Dhoni	4477
RV Uthappa	4446
AB de Villiers	4428
G Gambhir	4223

Virat Kohli is the highest run getter in IPL with 5434 runs.

Most Sixes in IPL (2008-2018)

	sixes
batsman	
CH Gayle	327
AB de Villiers	214
MS Dhoni	207
SK Raina	195
RG Sharma	194
V Kohli	191
DA Warner	181
SR Watson	177
KA Pollard	175
YK Pathan	161

Chris Gayle tops the list with the most number of sixes (327)

Most Fours

	fours
batsman	
S Dhawan	526
SK Raina	495
G Gambhir	492
V Kohli	482
DA Warner	459
RV Uthappa	436
RG Sharma	431
AM Rahane	405
CH Gayle	376
PA Patel	366

Shikhar Dhawan tops the list with 526 fours in the IPL followed by Suresh Raina (495) and Gautam Gambhir (492).

Highest Strike Rate (16-20 overs)

This will help team management to decide which player/batsman is reliable in the last four overs. Only batsman with minimum of 500 runs in last four overs is considered.

	strike_rate
batsman	
AB de Villiers	226.5
AD Russell	207.6
V Kohli	198.6
RG Sharma	193.4
DA Miller	184.0
MS Dhoni	183.9
DJ Bravo	182.6
KD Karthik	177.7
JP Duminy	177.6
HH Pandya	175.3

AB de Villiers has the highest strike rate of 226.5 between 16 – 20 overs. Followed by Andre Russell (207.6) and Virat Kohli (198.6)

Most Matches Played

batsman	matches
SK Raina	189
RG Sharma	182
RV Uthappa	170
MS Dhoni	170
V Kohli	169
KD Karthik	162
S Dhawan	158
YK Pathan	153
G Gambhir	151
AB de Villiers	142

Suresh Raina has played most matches (189) in the Indian Premier League.

Highest Wicket Taker

	Wickets
bowler	
SL Malinga	188
DJ Bravo	168
A Mishra	165
Harbhajan Singh	161
PP Chawla	156
B Kumar	141
R Ashwin	138
SP Narine	137
UT Yadav	136
R Vinay Kumar	127

Lasith Malinga is the highest wicket taker in the IPL so far, with total 188 wickets to his name.

Best Economy (16-20 overs)

This will help team management to decide which bowlers should bowl the last four overs.

The bowlers who have bowled at least 100 total balls in the last four overs are considered.

	economy
bowler	
Rashid Khan	7.4
DE Bollinger	7.4
WD Parnell	7.8
SL Malinga	7.8
MA Starc	7.8
A Kumble	7.9
SP Narine	8.0
SW Tait	8.1
Harbhajan Singh	8.1
Harmeet Singh	8.2

Rashid Khan has the lowest economy rate of 7.4 in the last four overs.

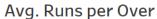
Player of the Match

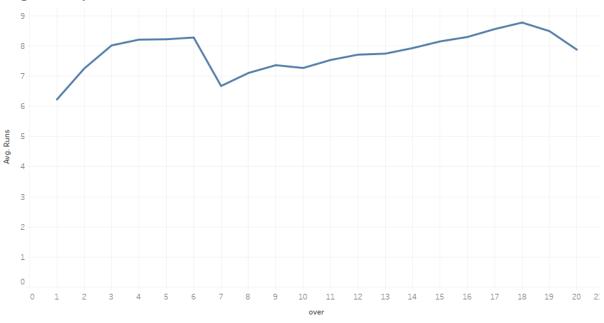
	award_won	
player_of_match		
CH Gayle	21	
AB de Villiers	20	
MS Dhoni	17	
DA Warner	17	
RG Sharma	17	
YK Pathan	16	
SR Watson	15	
SK Raina	14	
G Gambhir	13	
MEK Hussey	12	

Chris Gayle have won player of the match award 21 times in the IPL which is the highest.

Additional Stats

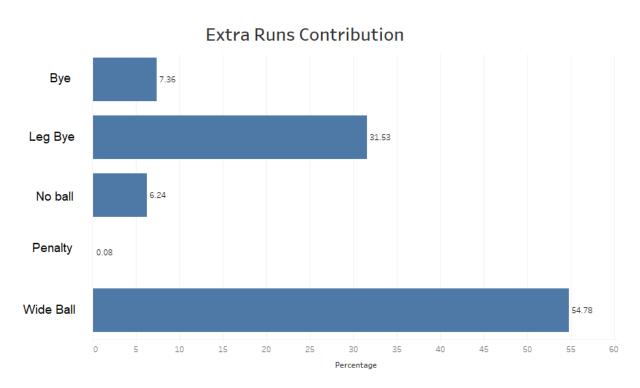
Average Runs per Over





We can observe that there is a sudden drop of avg. runs after the first batting power play (1-6 overs). And the avg. runs are more in 18^{th} over as compared to 19^{th} and 20^{th} over.

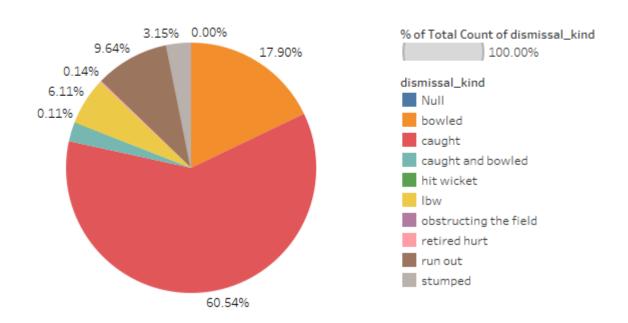
Extra Runs



Wide Ball contributes 54.78% of the total extra runs in the IPL. Penalty contributes the lowest 0.08% of extra runs.

Dismissal Kind

Dismissal



Catch Out contributes 60.54% of total wickets in IPL.

Rajiv Gandhi International Stadium, Uppal

Most Popular Venue

venue	
Eden Gardens	77
Wankhede Stadium	73
M Chinnaswamy Stadium	73
Feroz Shah Kotla	67

matches_played

56

Eden Gardens, Kolkata is the most popular venue which hosted 77 IPL matches.

Most Popular Umpire

	matches
umpire1	
S Ravi	106
HDPK Dharmasena	87
C Shamshuddin	73

S Ravi has umpired total 106 IPL matches making him the most popular umpire. Kumar Dharmasena and C Shamshuddin umpired 87 and 73 respectively.