

IPL VISUALIZATION ASSIGNMENT

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PROBLEM DESCRIPTION

- The Indian Premier League, or IPL, is a T20 cricket league, which was founded in 2008 and is held every year. It sees participation from both national and international players, and eight teams representing eight Indian cities compete with each other
- You work as a data analyst at **IFP**, a nationally recognised news agency, which is based out of New Delhi, and provides news reports and feeds to magazines, newspapers and TV broadcasters all over the country. The Sports Editor of the agency has approached you to build a Tableau dashboard of IPL statistics over the years since its inception in order to create an infographic for a newsletter that their team is working on.

OBJECTIVE

Build an interactive dashboard in Tableau for visualizing various important statistics of the IPL seasons from 2008 to 2017.

ASSIGNMENT SUB TASKS

1. Match Statistics

Toss outcome vs Match outcome (for each Ground/Venue)

Biggest wins (by runs and by wicket)

Highest totals (across all the seasons)

2. Player Statistics

Orange Cap contenders (The batsmen who have scored the maximum number of runs in a particular season)

Purple Cap contenders (The bowlers who have taken the maximum number of wickets in a particular season)

Batsmen who have hit the most number of fours and sixes (per season and overall)

3. Team Statistics

Season-wise team performance (wins vs losses)

Win %age (home vs away)

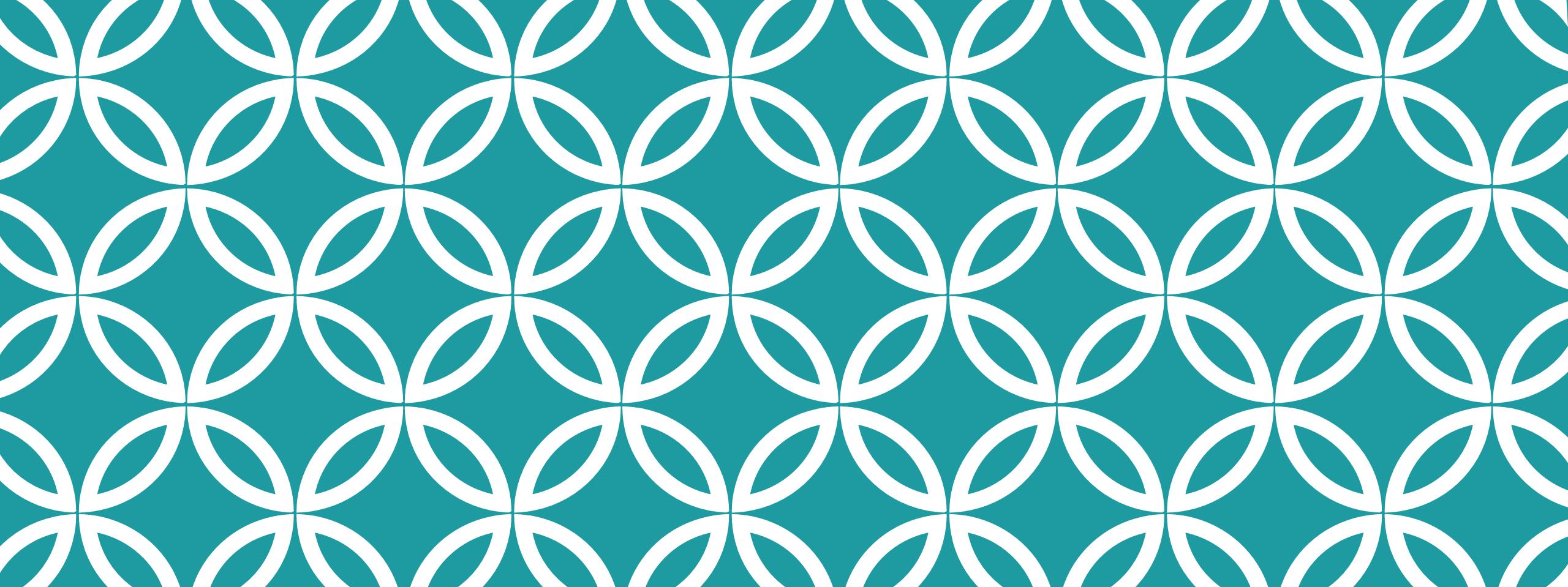
DATA UNDERSTANDING

The '**deliveries.csv**' file contains ball-by-ball information for all the matches across all the seasons of IPL. Each row in this data set contains:

1. Match related information (batting team vs bowling team)
2. Player information (Bowler, Batsman, Non-striker)
3. Delivery information (Runs scored, Wickets, Extras, etc.)

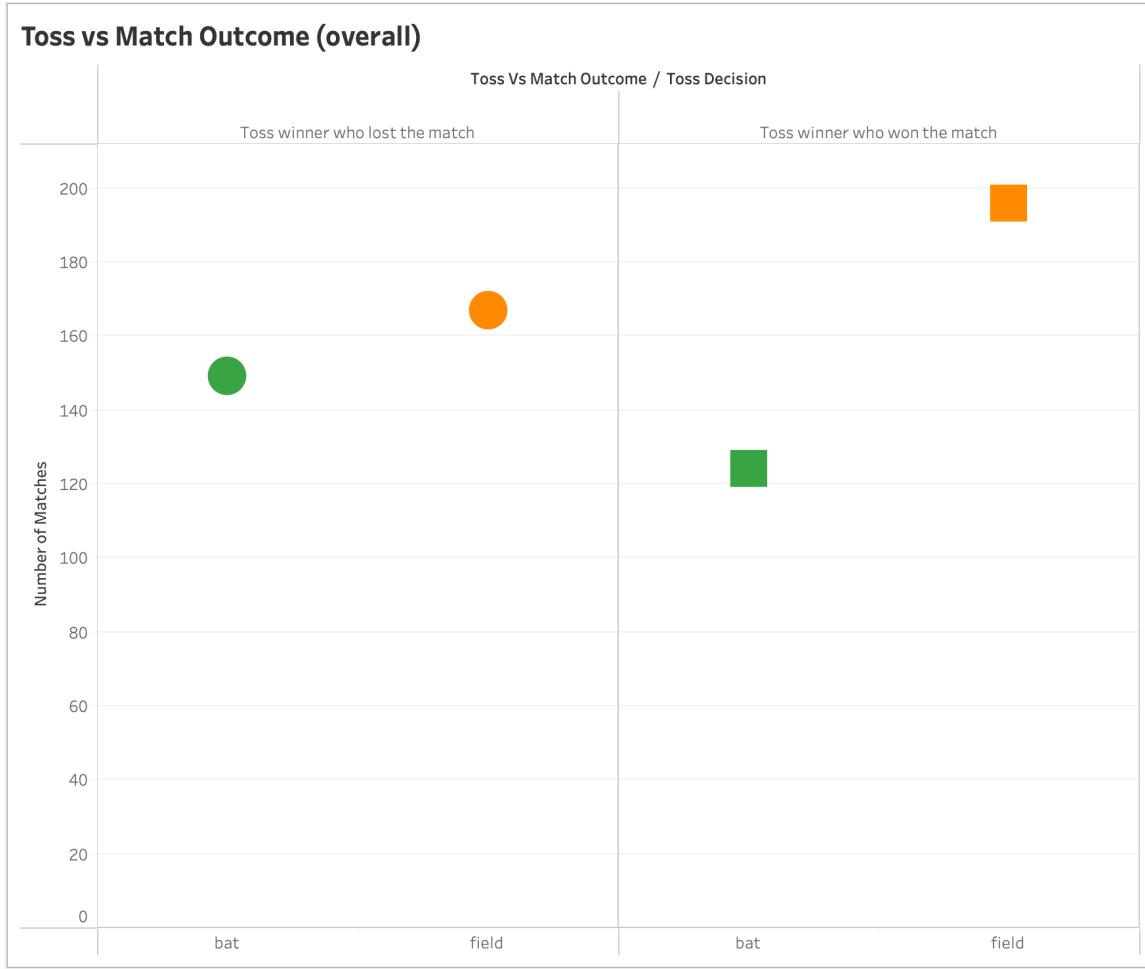
The '**matches.csv**' file contains the following data:

1. Teams involved
2. Results (which team won, win type, player of the match, etc.)
3. Match specifics (umpires, ground, etc.)



MATCH STATISTICS

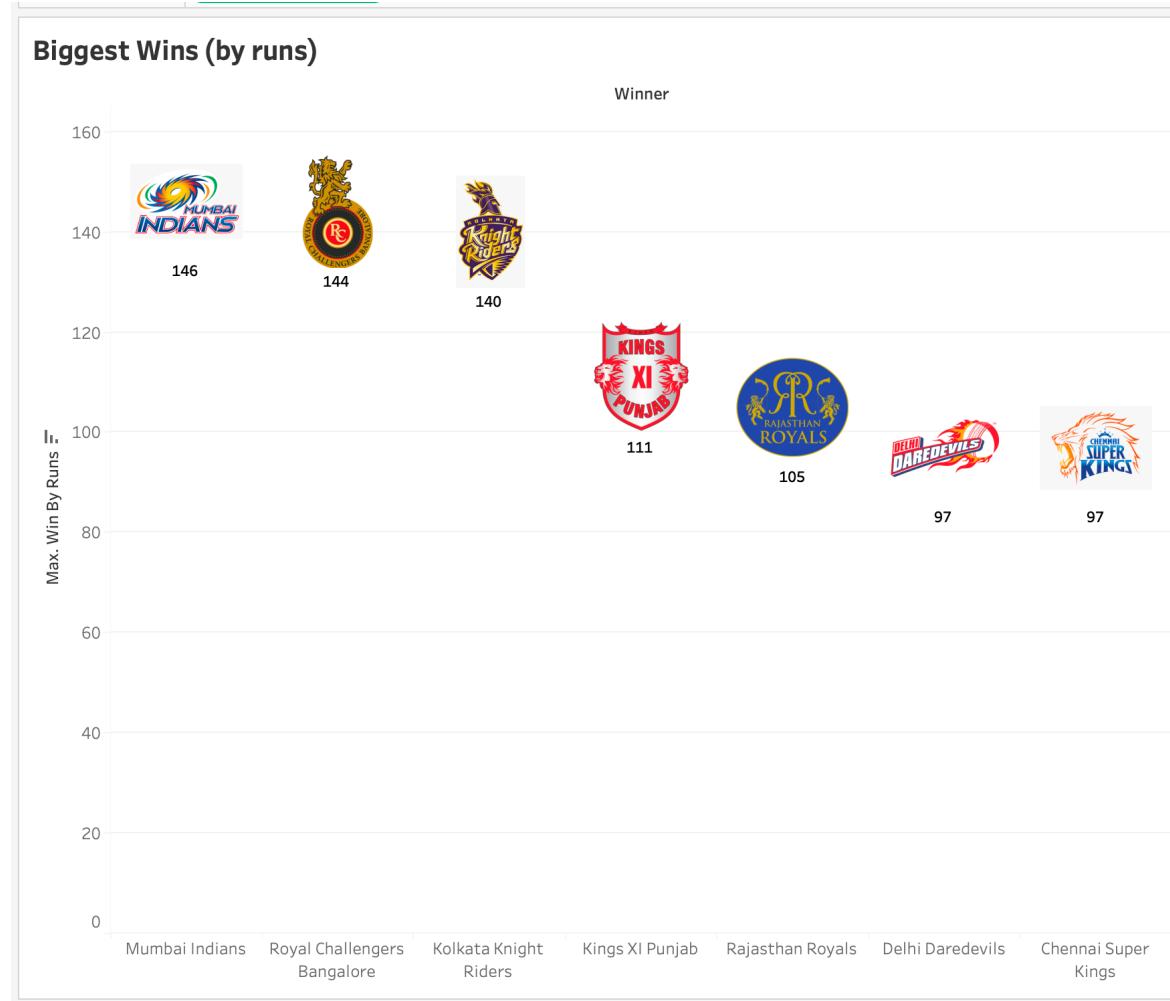
TOSS OUTCOME VS MATCH OUTCOME



Insights:

1. Choosing to field after winning the toss is a good decision as it has higher chances of winning compared to batting first.
2. While the toss decision doesn't throw any light in the opposite case, i.e., winning the toss but losing the match.
3. Fielding is a popular option even if the teams win or loss the toss.

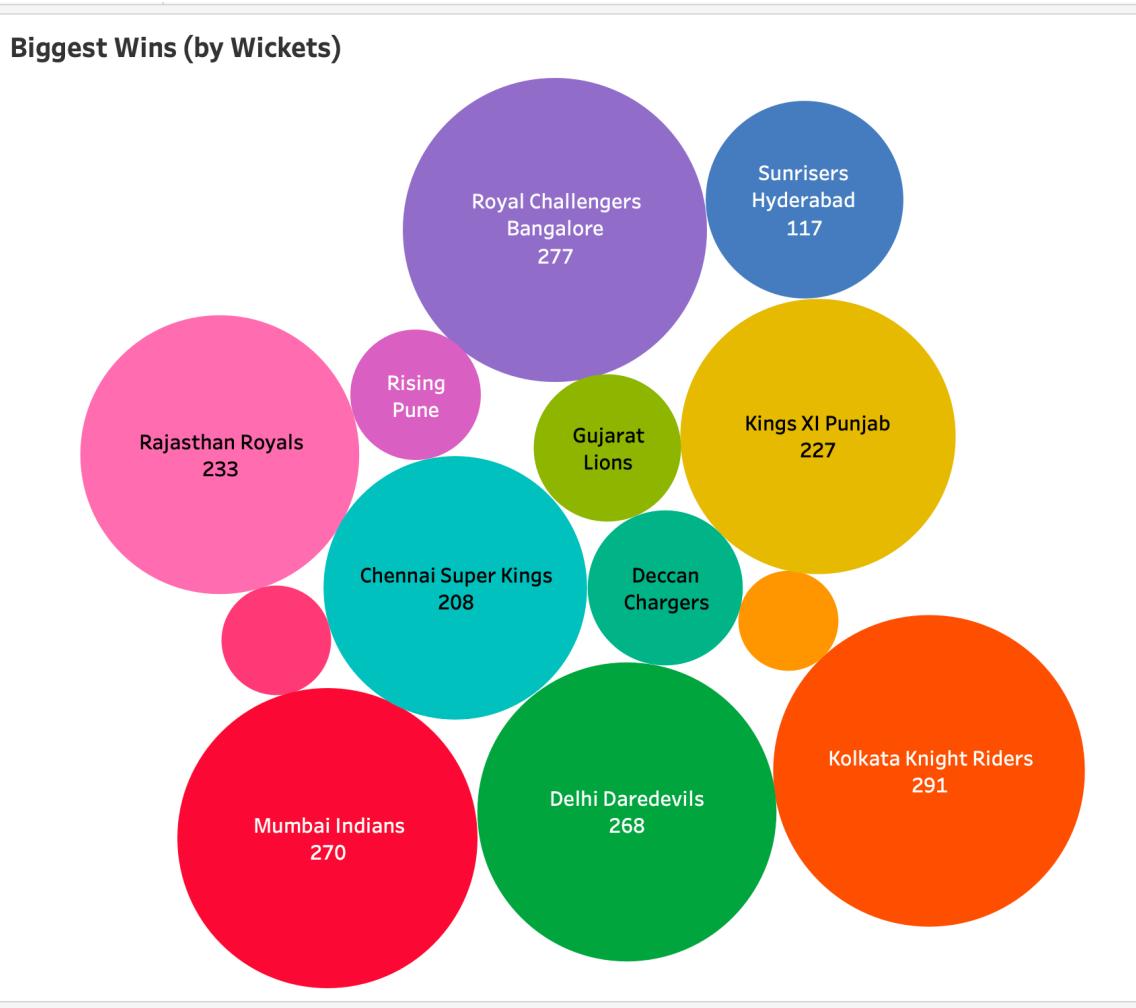
BIGGEST WINS (BY RUNS)



Insights:

1. The biggest win over the entire seasons from 2008 to 2017 was by Mumbai Indians by 146 runs.
2. This is followed by Royal Challengers Bangalore by 144 runs.

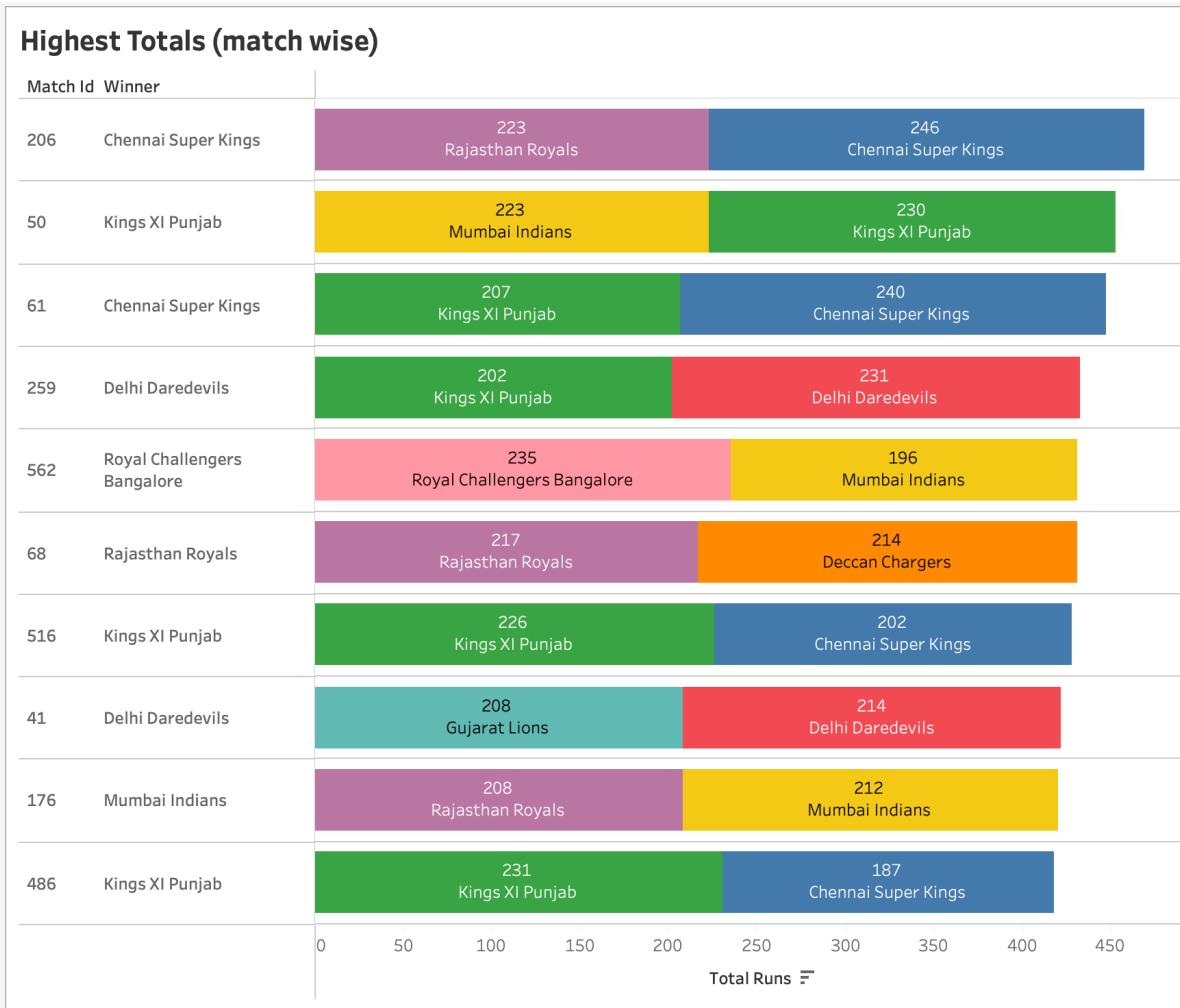
BIGGEST WINS (BY WICKETS)



Insights:

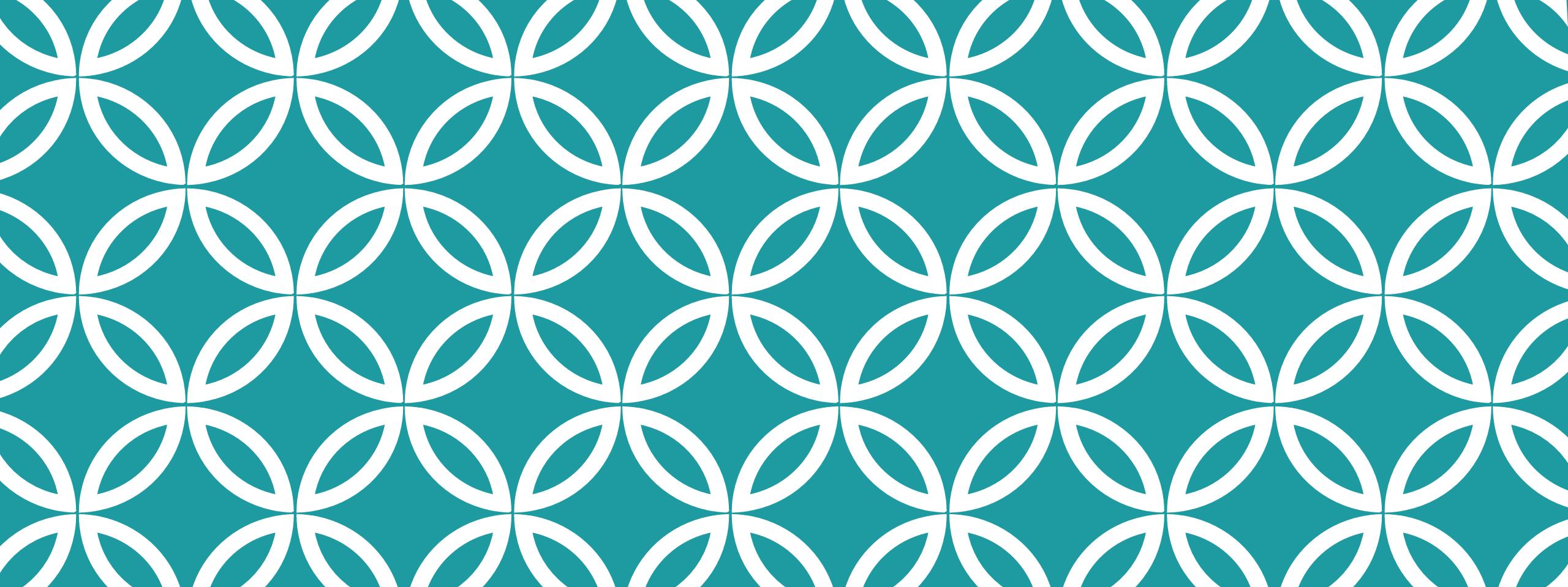
1. The biggest win by wickets was by Kolkata Knight Riders by a wicket margin of 291 wickets overall in the all matches they played and won.
2. This is followed by Royal Challengers Bangalore by a total wickets margin of 277 from all the matches they played and won.

HIGHEST TOTAL (MATCH-WISE)



Insights:

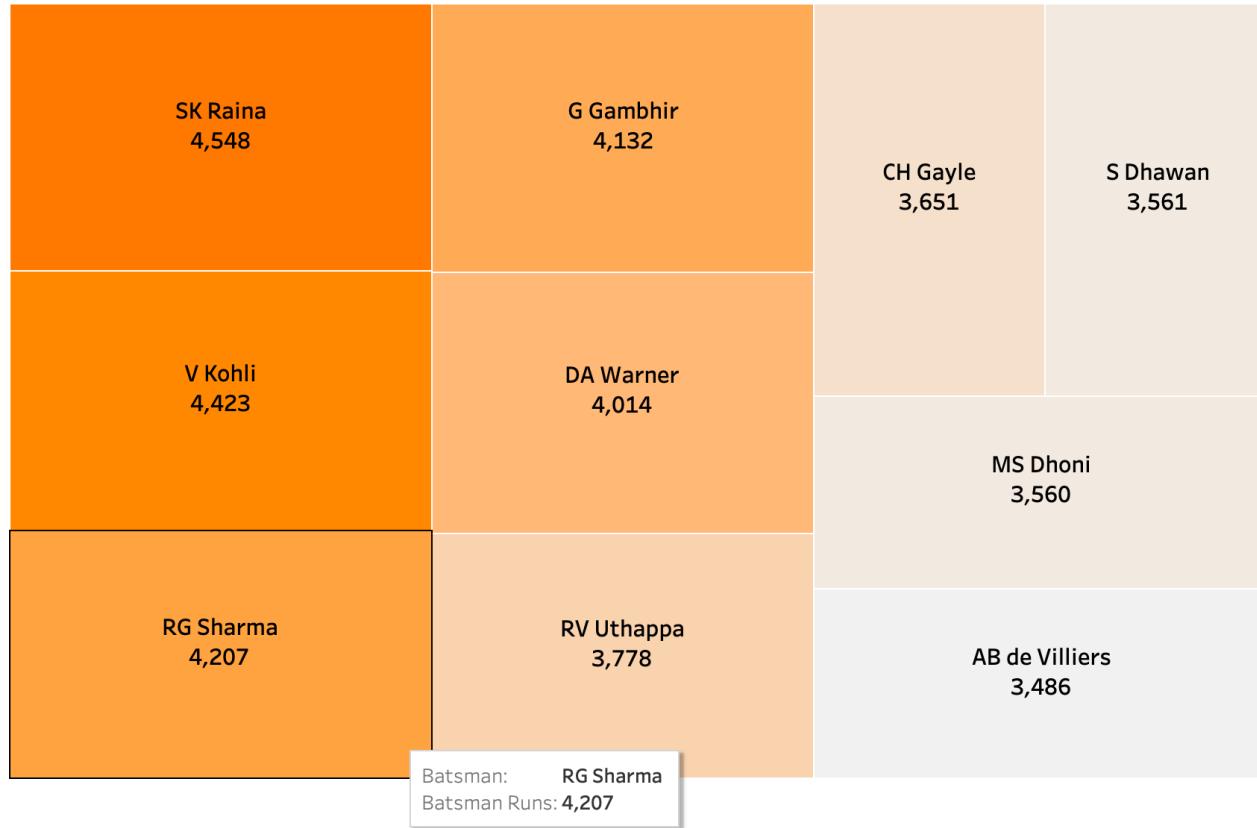
1. The highest total overall across all seasons was during the match id 206 which was between Rajasthan Royals and Chennai Super Kings.
2. CSK had scored 246 runs and won the match.
3. Followed by match id 50 between Mumbai Indians and Kings XI Punjab where the later won by 7 runs.



PLAYER STATISTICS

ORANGE CAP CONTENDERS

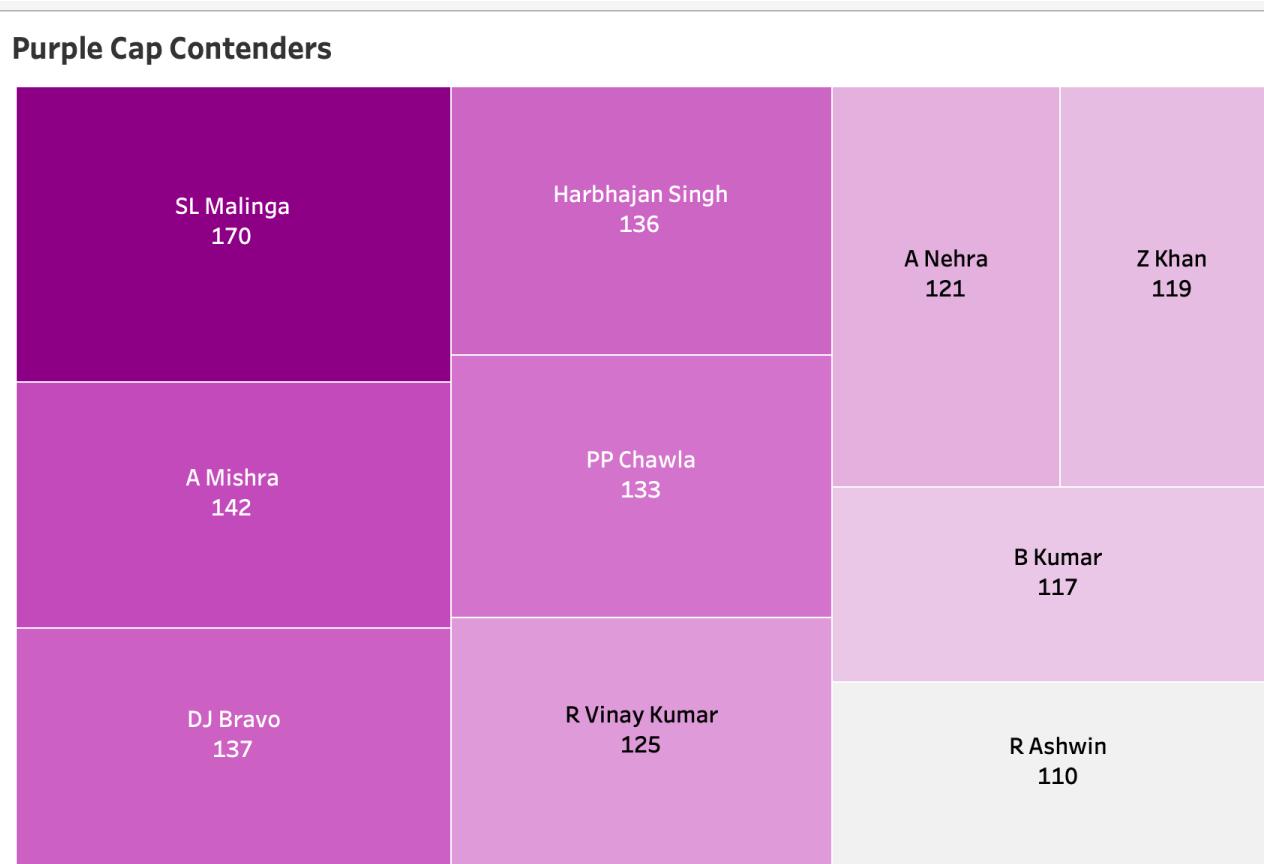
Orange Cap Contenders



Insights:

1. The highest run was scored by SK Raina which is 4548 for the overall seasons from 2008 to 2017.
2. This is followed by Virat Kohli(4423) and RG Sharma(4207).

PURPLE CAP CONTENDERS

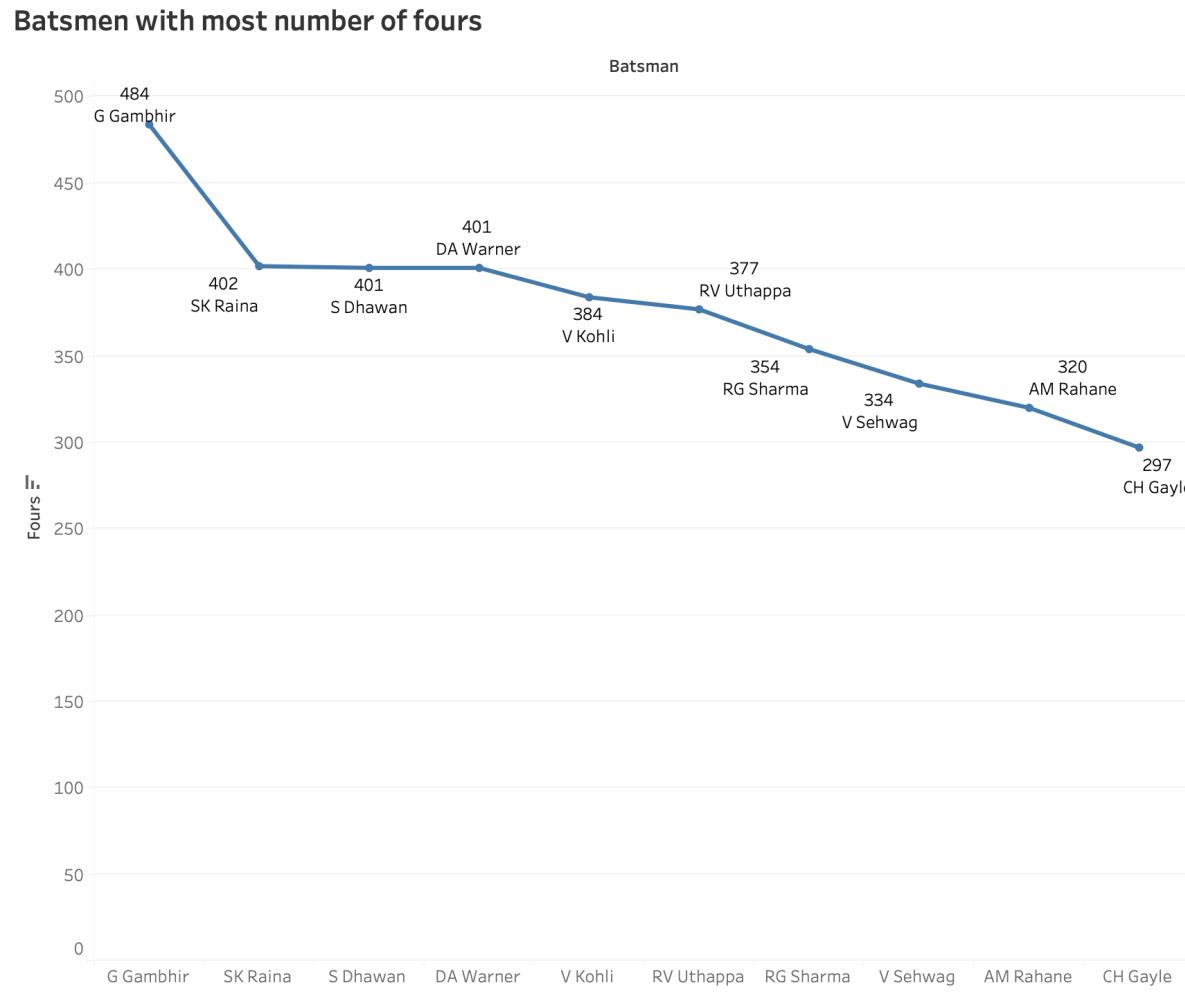


Insights:

1. The highest number of wickets was taken by SL Malinga which is 170 wickets across all seasons from 2008 to 2017.
2. He is followed by A Mishra with 142 wickets.

BATSMEN WITH MOST NUMBER OF FOURS

Batsmen with most number of fours

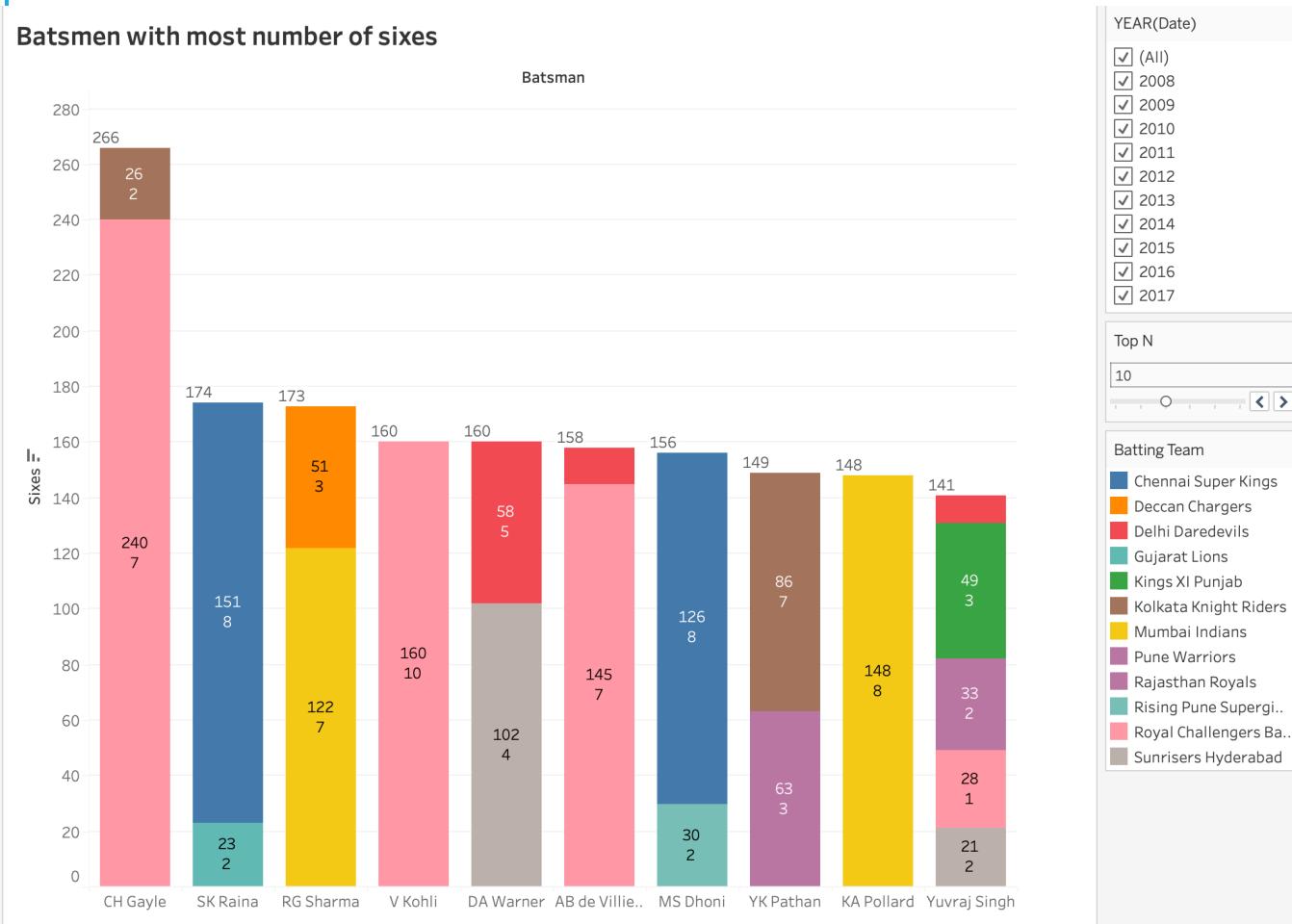


Insights:

1. The highest number of fours was by Gautam Gambir with 484 fours.
2. But, the first for the Orange cap contenders is SK Raina. Hence, we can strongly say that player with highest number of fours need not be the overall orange cap holder.
3. Also, we observe that Gambir is at 4th spot in the orange cap contenders, hence these 2 factors are definitely a close knit factor.

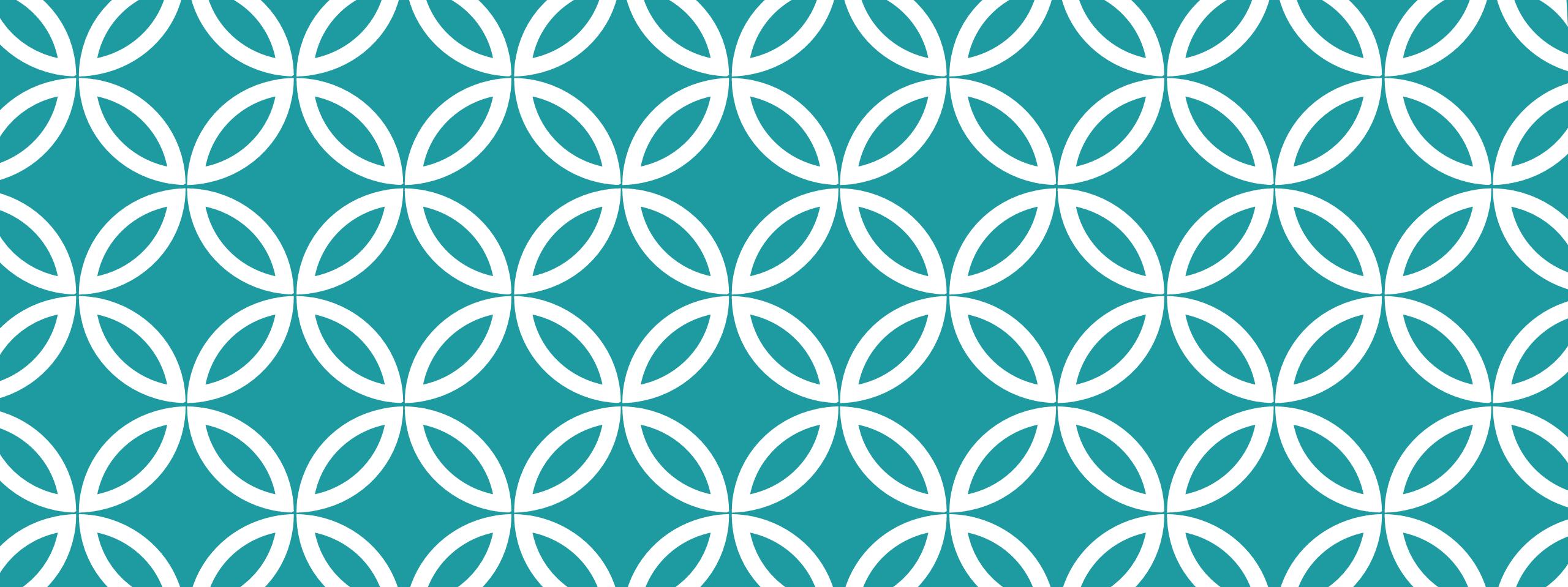
BATSMEN WITH MOST NUMBER OF SIXES

Batsmen with most number of sixes



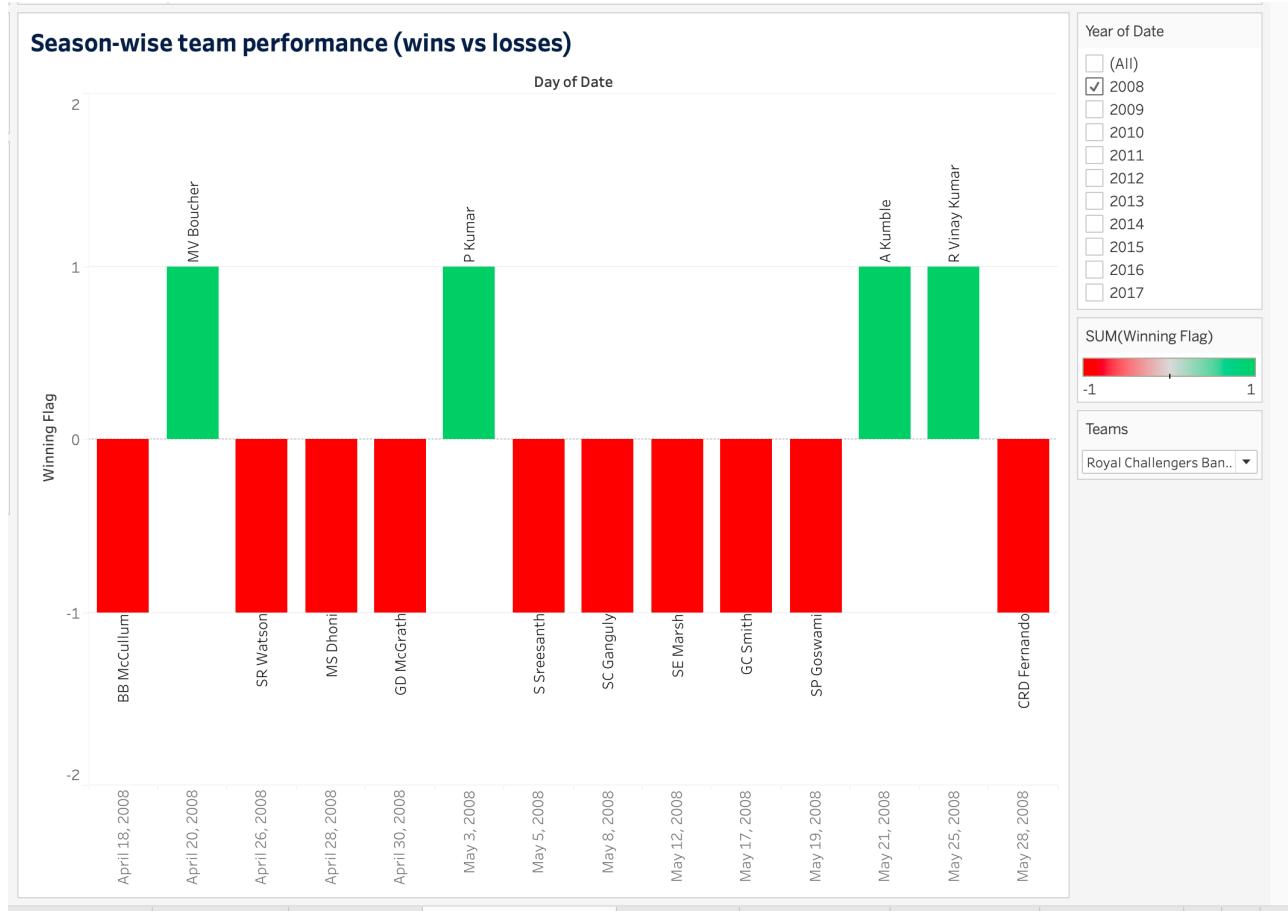
Insights:

1. The highest number of sixes was by CH Gayle with 266 sixes.
2. We see that he achieved this mainly when he was playing for RCB with 240 sixes during this period.
3. He is followed by SK Raina with 174 sixes.
4. This along with previous analysis shows that, SK Raina was a very good player with a good strike rate.



TEAM STATISTICS

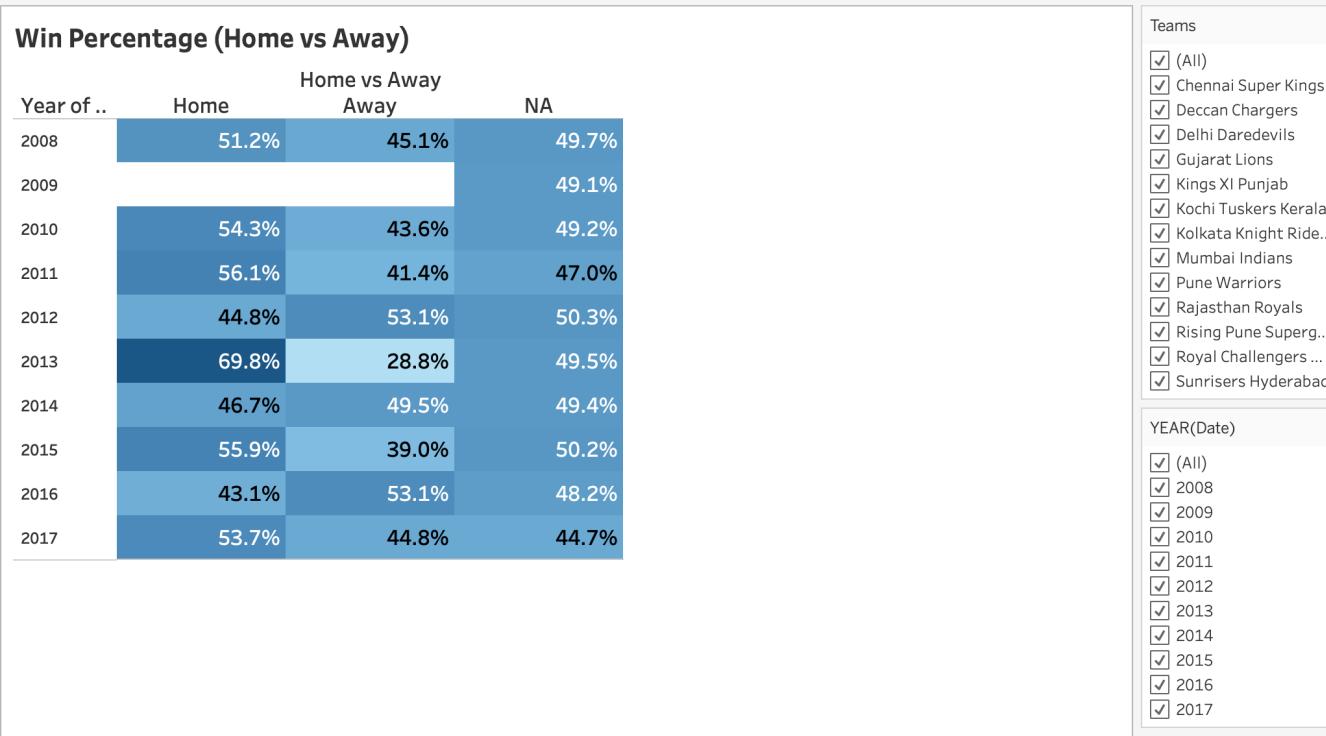
SEASON-WISE TEAM PERFORMANCE (WINS VS LOSSES)



Insights:

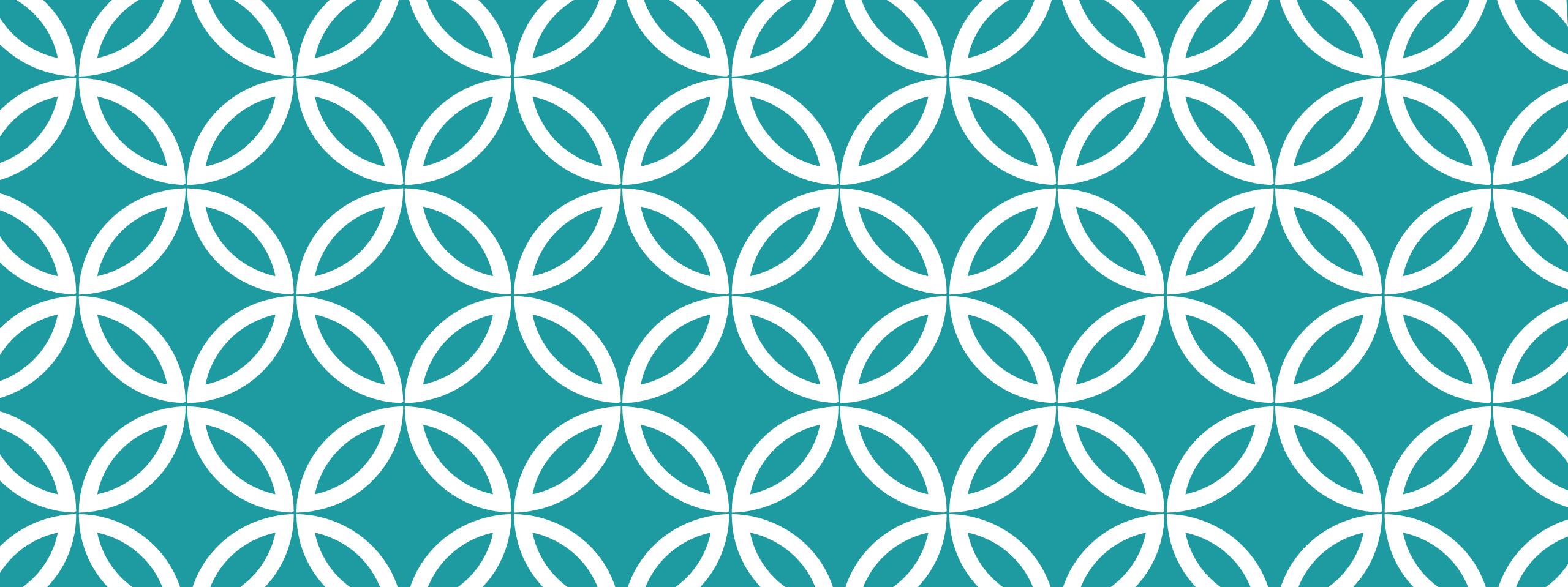
1. We see that with appropriate filters applied for each team and for each year we can filter out and analyze each team's performance.
2. With the help of the 'Winning Flag', a "1" indicates matches won and a "-1" indicates matches lost.
3. Also, the "player of the match" for each match can also be seen.

WIN PERCENTAGE (HOME VS AWAY)



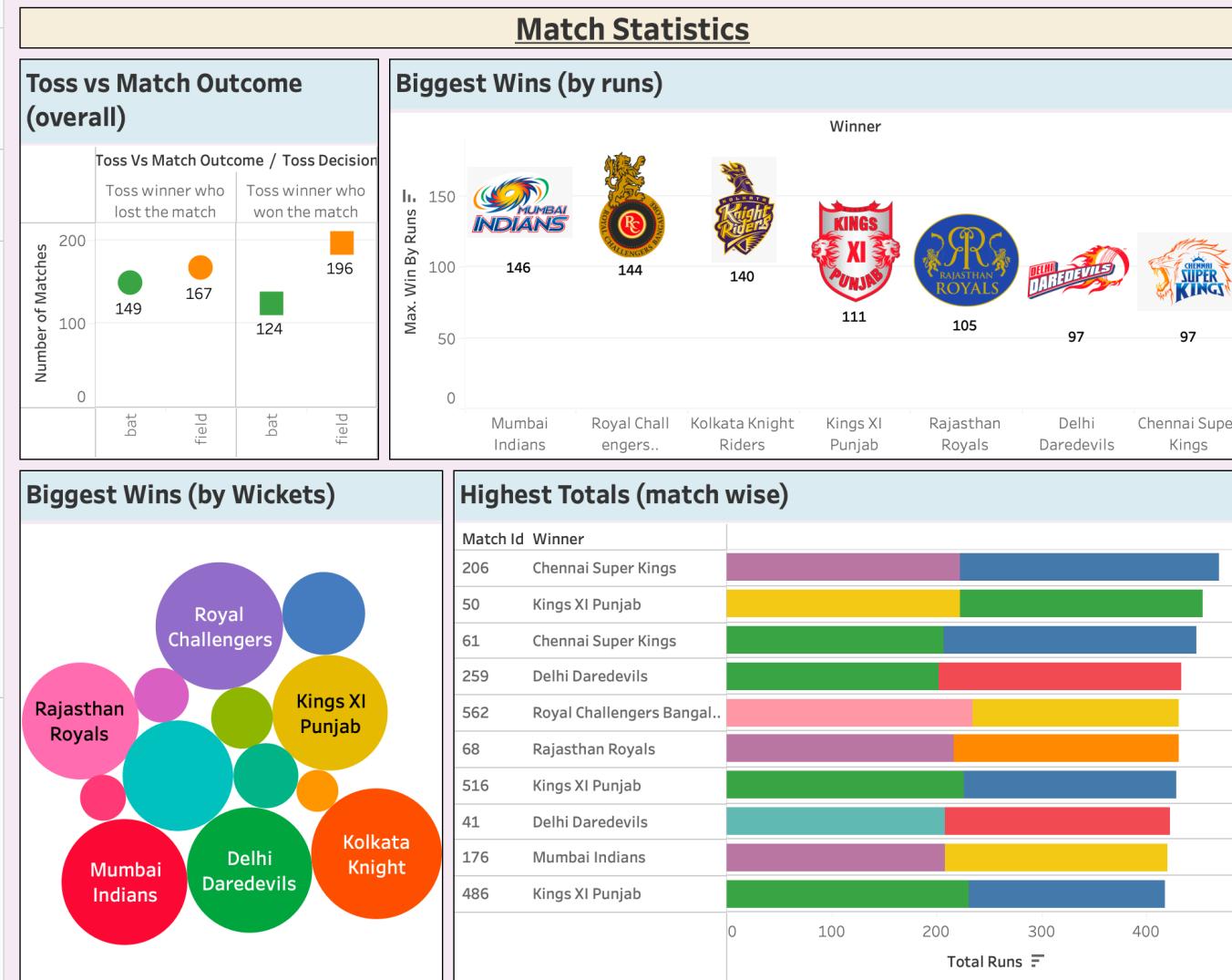
Insights:

1. The overall win percentage during the year 2008, for any team, is 51.2 % while playing in their respective home ground while it is 45.1% for while playing away from their home ground.
2. Similarly, the same was calculated for other seasons as well.
3. This can also be seen for individual teams also.

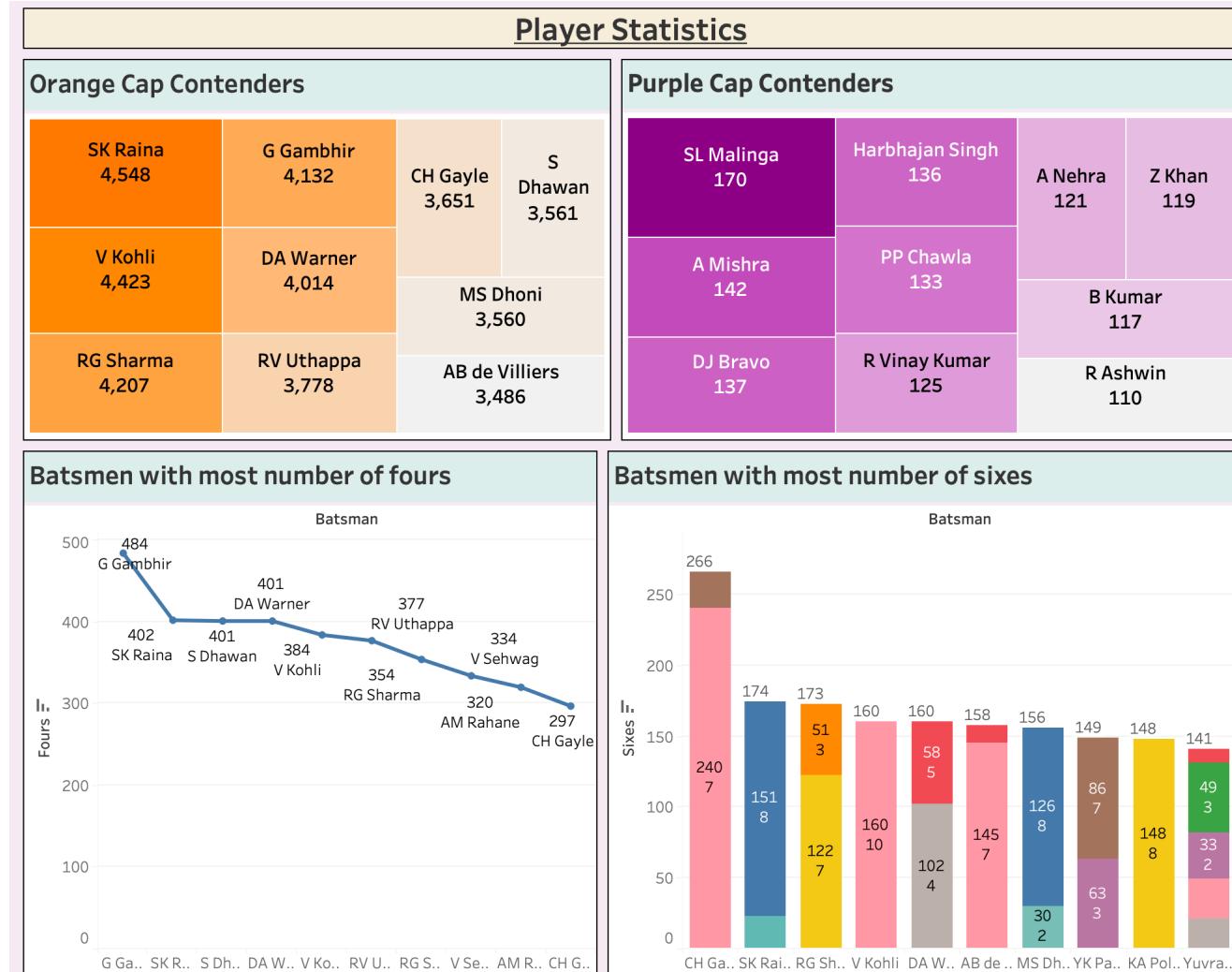


DASHBOARDS

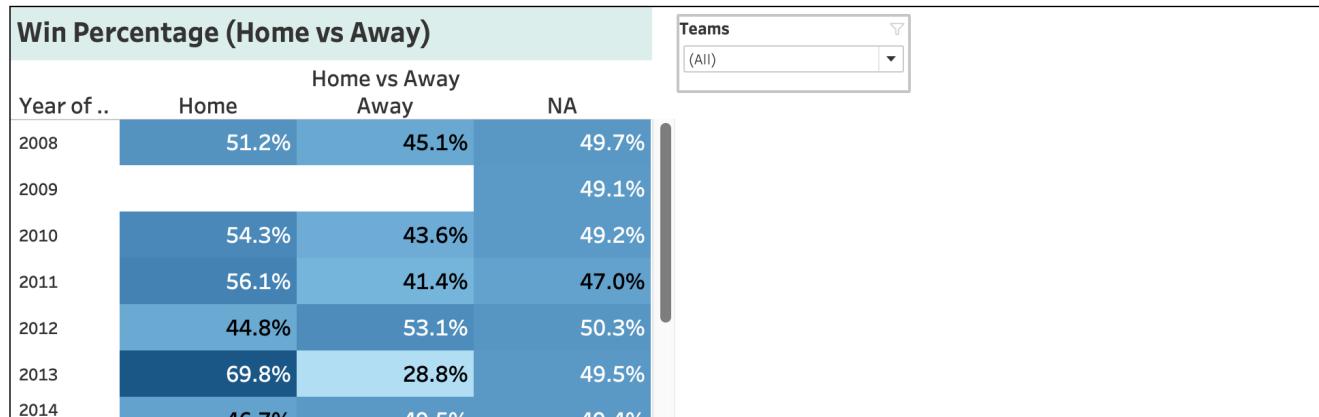
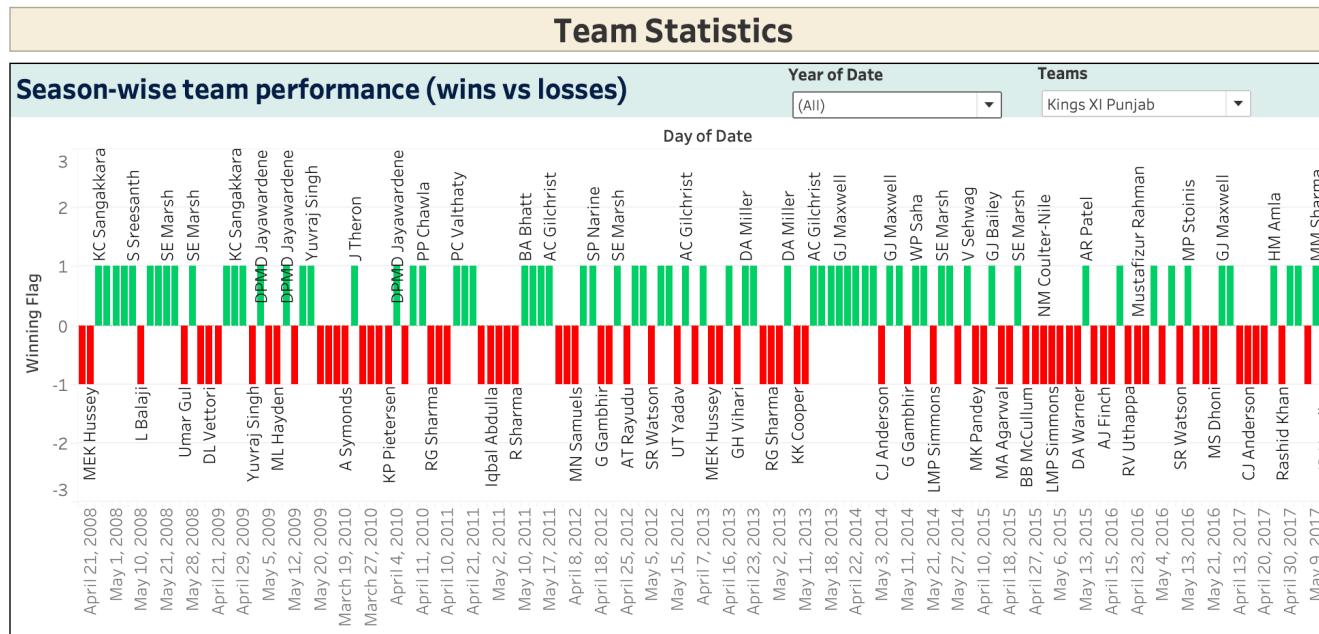
MATCH STATISTICS DASHBOARD



PLAYER STATISTICS DASHBOARD



TEAM STATISTICS DASHBOARD



SUMMARY

1. Fielding is a popular option even if the teams win or loss the toss.
2. The biggest win over the entire seasons from 2008 to 2017 was by Mumbai Indians by 146 runs.
3. The biggest win by wickets was by Kolkata Knight Riders by a wicket margin of 291 wickets overall in the all matches they played and won.
4. The highest total overall across all seasons was during the match id 206 which was between Rajasthan Royals and Chennai Super Kings.
5. CSK had scored 246 runs and won the match.
6. The highest run was scored by SK Raina which is 4548 for the overall seasons from 2008 to 2017.
7. The highest number of wickets was taken by SL Malinga which is 170 wickets across all seasons from 2008 to 2017.
8. The highest number of fours was by Gautam Gambir with 484 fours.
9. The highest number of sixes was by CH Gayle with 266 sixes.
10. The overall win percentage during the year 2008, for any team, is 51.2 % while playing in their respective home ground while it is 45.1% for while playing away from their home ground.