

# IPL Insights: Interactive Insights, IPL Statistics Unveiled Through Tableau Visuals from IPL History

# AGENDA

- Objective
- Background
- Key findings
- Appendix:
  - Data sources

# OBJECTIVE

- To create visual representations in Tableau directly for infographics, and in a few cases.
- **To develop Interactive Dashboards** offering various filters and customizations to enable viewers to explore different aspects of the data.
- **Provide Detailed Analysis Across Key Categories:** The dashboard should be organized into three main categories - **Match Statistics, Player Statistics, and Team Statistics**. The objective is to offer comprehensive insights in these cases.

# BACKGROUND

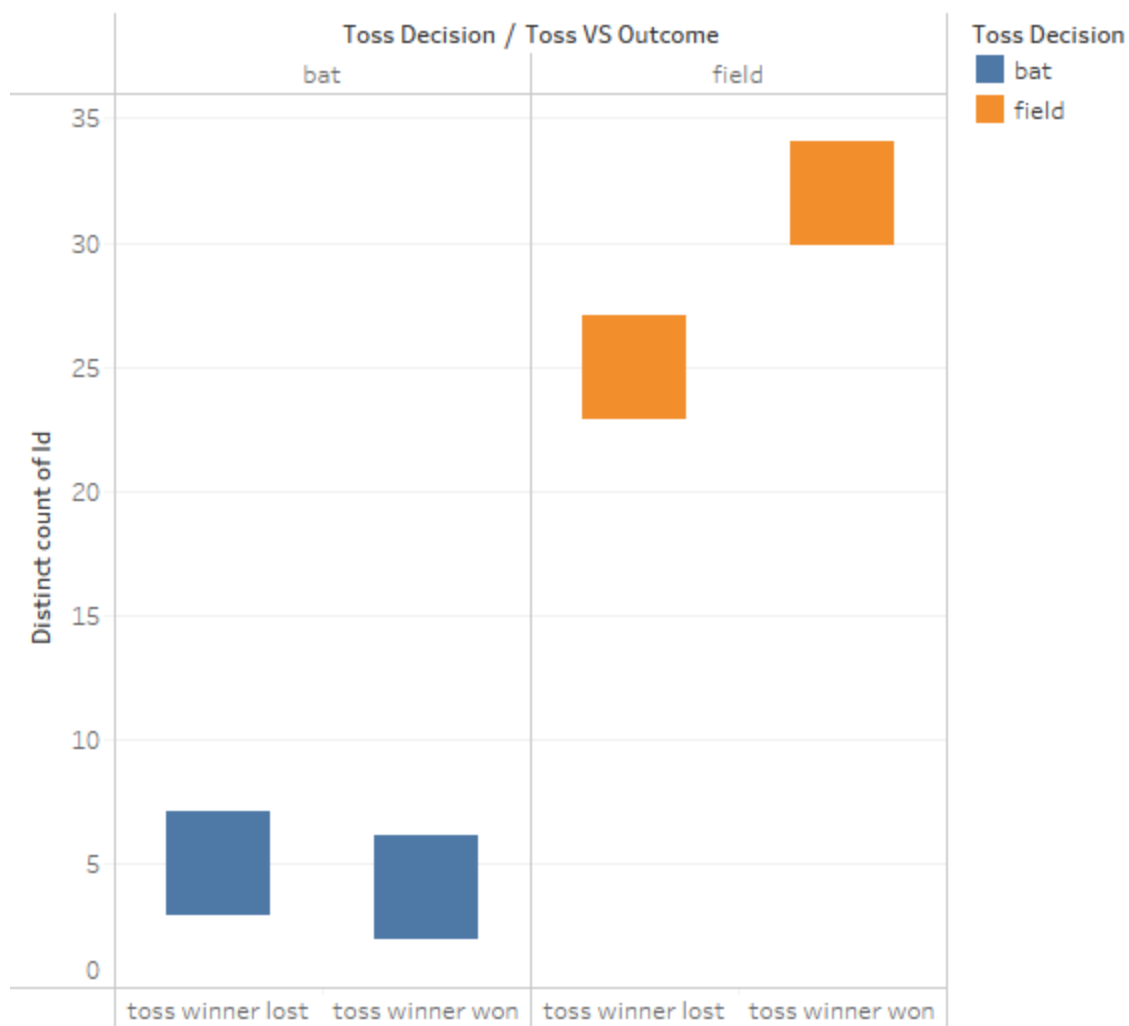
- The Indian Premier League, or IPL, is a T20 cricket league, which was founded in 2008 and is held every year. It sees participation from both national and international players, and eight teams compete with each other in a double robin round format in the league stages, followed by playoffs. Over the years, IPL has become one of the most-watched and most attended live sporting events all over the world.
- **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 wants to build a Tableau dashboard of IPL statistics over the years since its inception in order to create an infographic for a newsletter that they are working on.
- This requires visual representations, insights and a interactive dashboard from the data set given.

# KEY FINDINGS

## Toss outcome vs Match outcome

- In the Toss outcome vs Match outcome (for each Ground/Venue) graph, the team which won the toss and its decision to bat or bowl first and the team which won the match is depicted.
- This data can be filtered for all the venues/ground where the matches were played, accordingly.
- Filters can be applied for the required venues for required data.

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

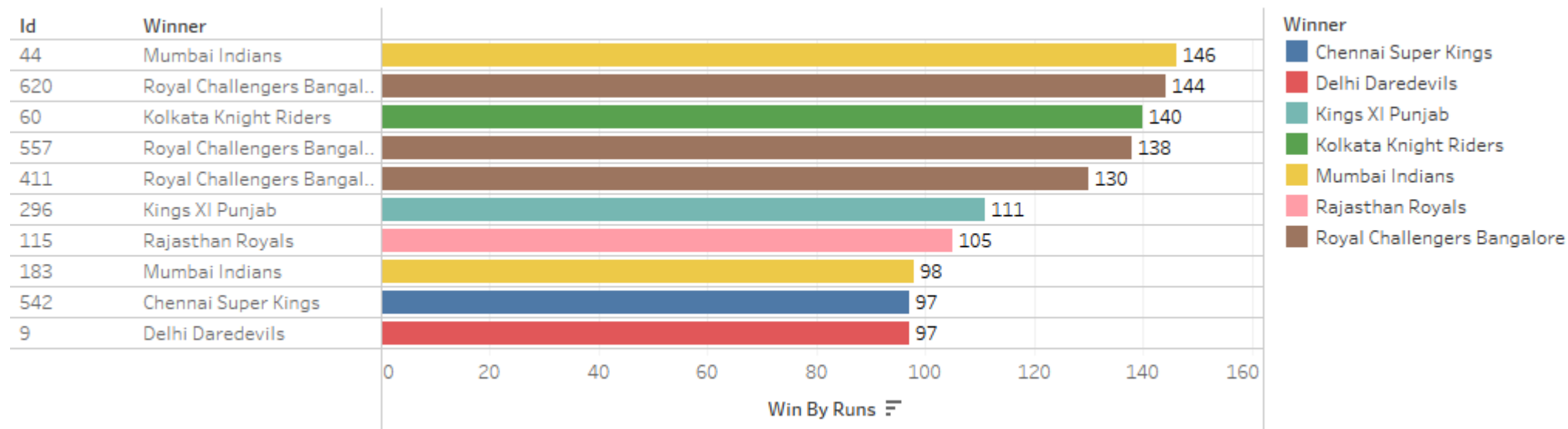


Distinct count of Id for each Toss VS Outcome broken down by Toss Decision. Color shows details about Toss Decision. The data is filtered on Venue, which keeps M Chinnaswamy Stadium.

# Biggest wins (by runs)

- In the next bar graph, the details and infographics on Biggest wins (by runs) is shown.
- According to the graph, **MUMBAI INDIANS** team have the biggest win by runs across all the **IPL** seasons, that is **146 runs**.
- Top 10 teams who won by biggest runs across seasons have been shown in the graph.

## Biggest wins (by runs)



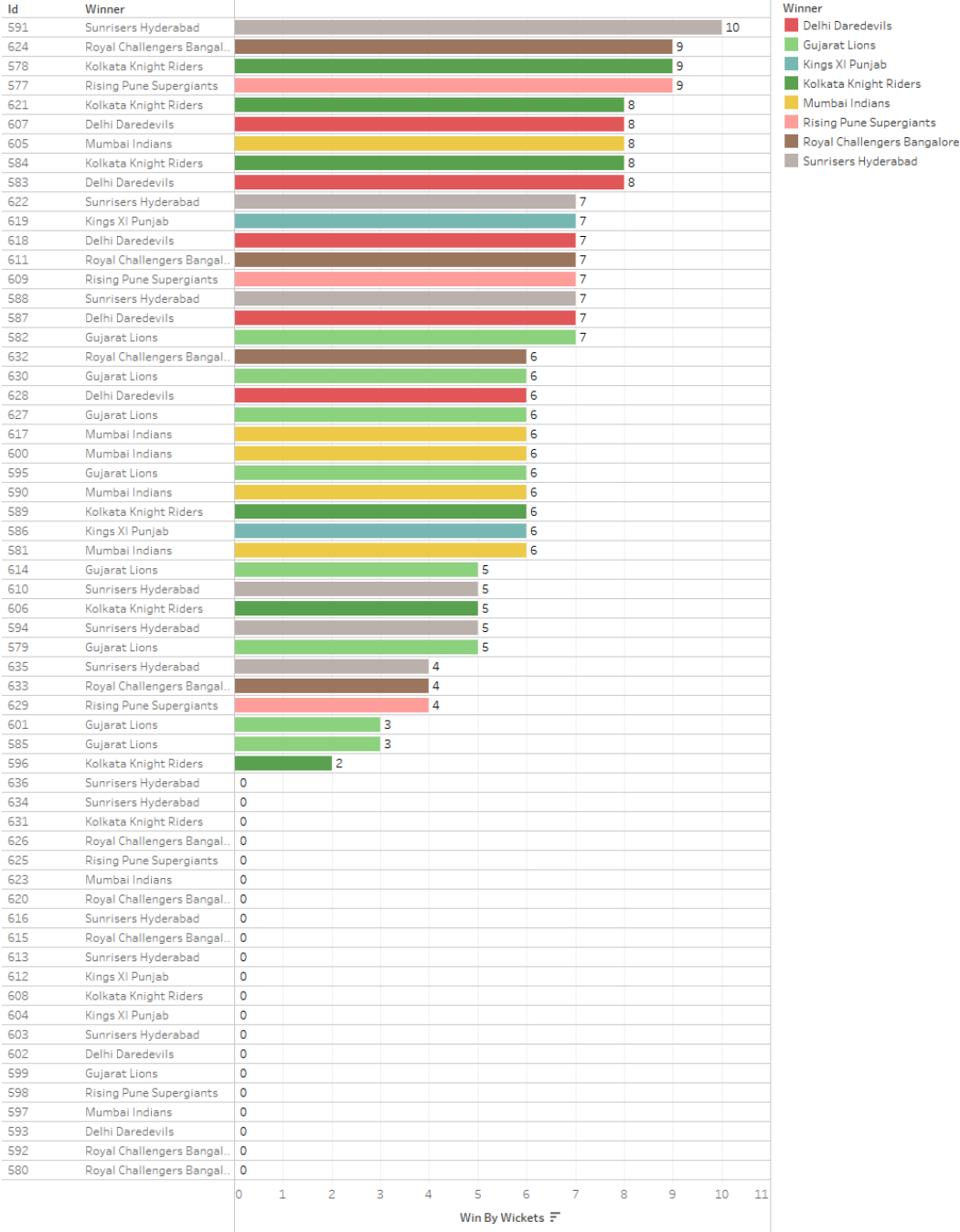
Sum of Win By Runs for each Winner broken down by Id. Color shows details about Winner. The marks are labeled by sum of Win By Runs. The view is filtered on Id, which keeps 10 of 636 members.



# Biggest wins (by wickets)

- Here **SUN RISERS HYDERABAD** is the only team which has **WON BY 10 WICKETS** for the **IPL SEASON 2016**.
- Next is the infograph is on Biggest wins (by wickets)
- Here the team which won by biggest margins in terms of wickets can be found out for season using the filter where according to the year.

Biggest wins (by Wickets)

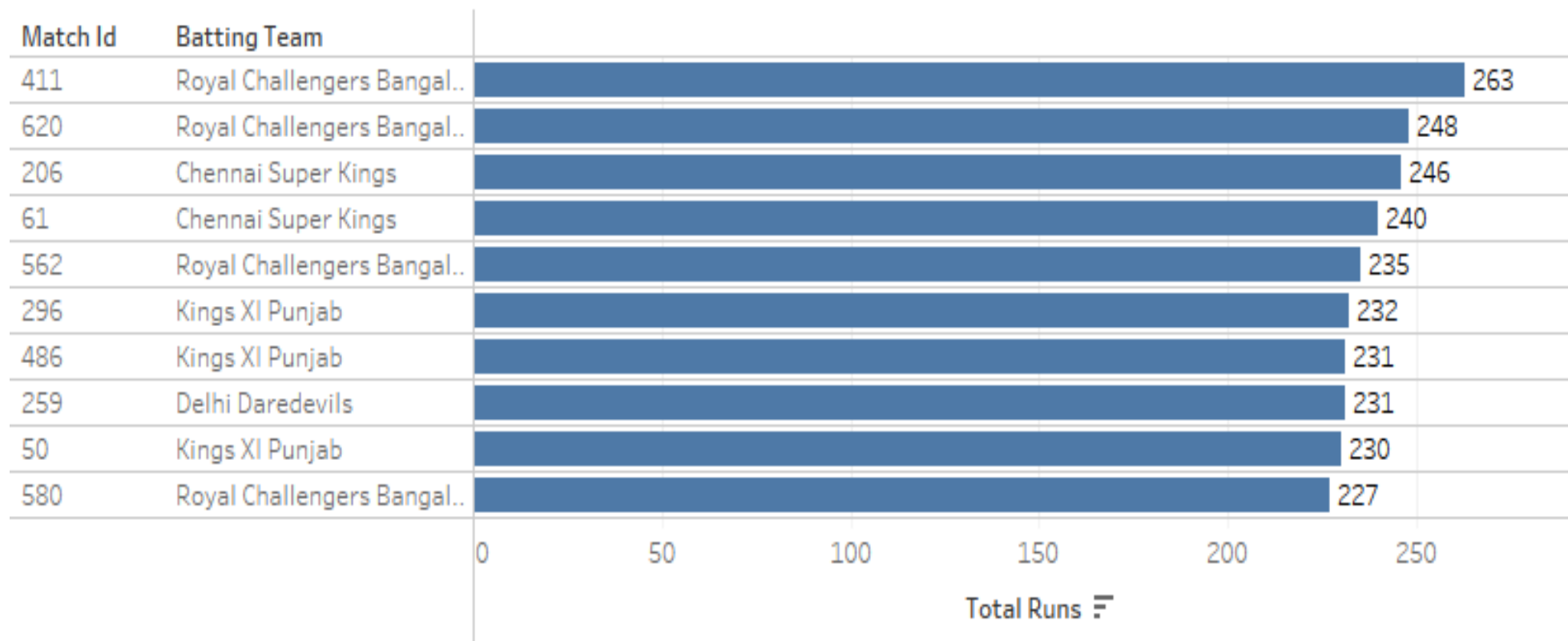


Sum of Win By Wickets for each Winner broken down by Id. Color shows details about Winner. The marks are labeled by sum of Win By Wickets. The data is filtered on Date Year, which keeps 2016. The view is filtered on Id, which keeps 636 of 636 members.

# Highest totals (across all the seasons)

- It can be seen that **ROYAL CHALLENGERS BANGALORE** is the team which has made highest total across the seasons, i.e, **263 runs in the year 2013**.
- **ROYAL CHALLENGERS BANGALORE** is also the only team which has featured 4 times in **the top 10 Highest totals** across the seasons.
- Using the filter option top 10 teams for scoring highest runs for a particular year can also be found out

## Highest Totals

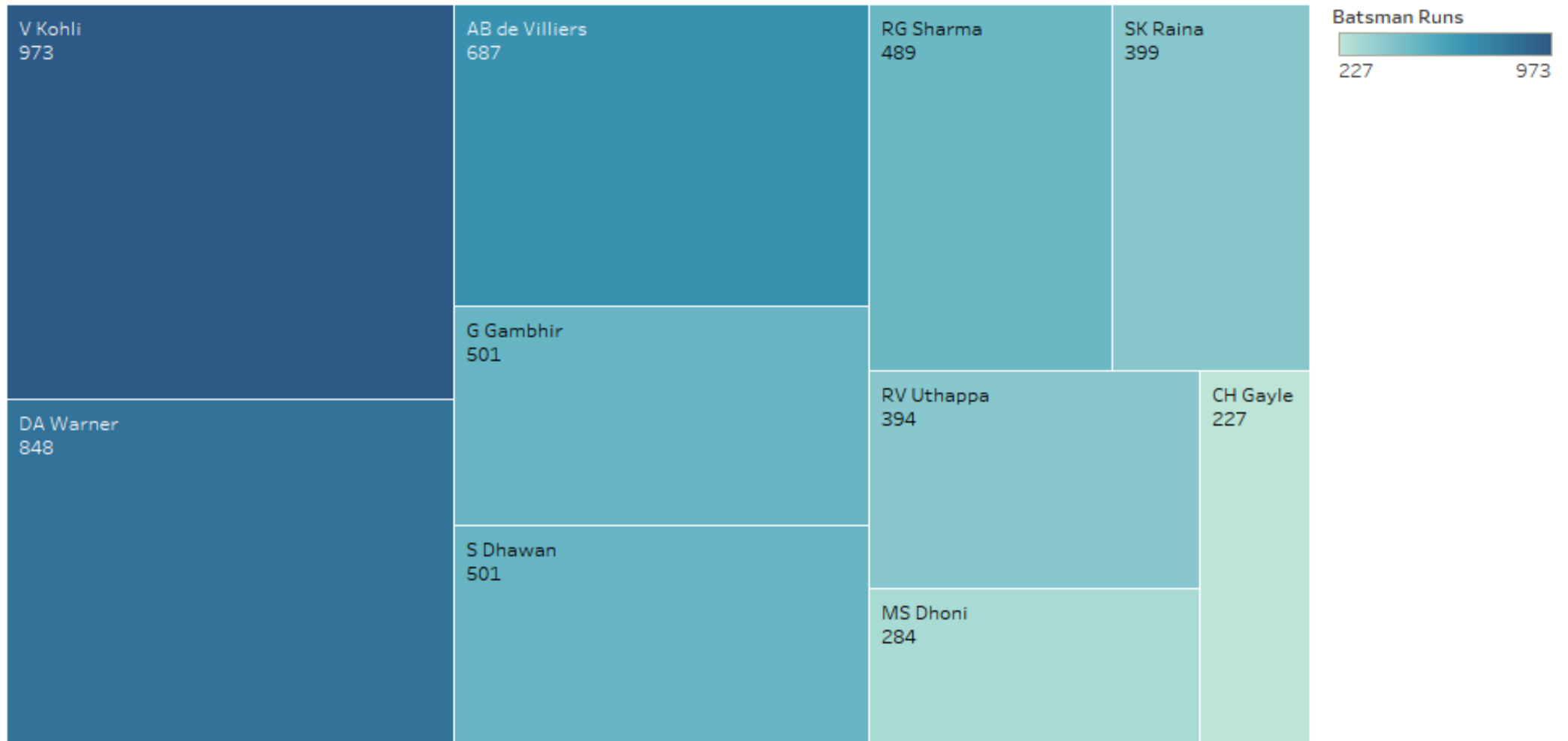


Sum of Total Runs for each Batting Team broken down by Match Id. The marks are labeled by sum of Total Runs. The data is filtered on Season and Match\_innings. The Season filter ranges from 2008 to 2017. The Match\_innings filter has multiple members selected.

# Orange Cap contenders

- Orange Cap contenders list(The batsmen who have scored the maximum number of runs in a particular season) for the **year 2016** can be seen in the tree map and **Virat Kohli** leads the board by **973 runs** which is also the highest across seasons for an orange cap holder.
- Information on Top contenders and the winner for orange cap holders for each season can also be known using date as filter.

## Orange Cap contenders

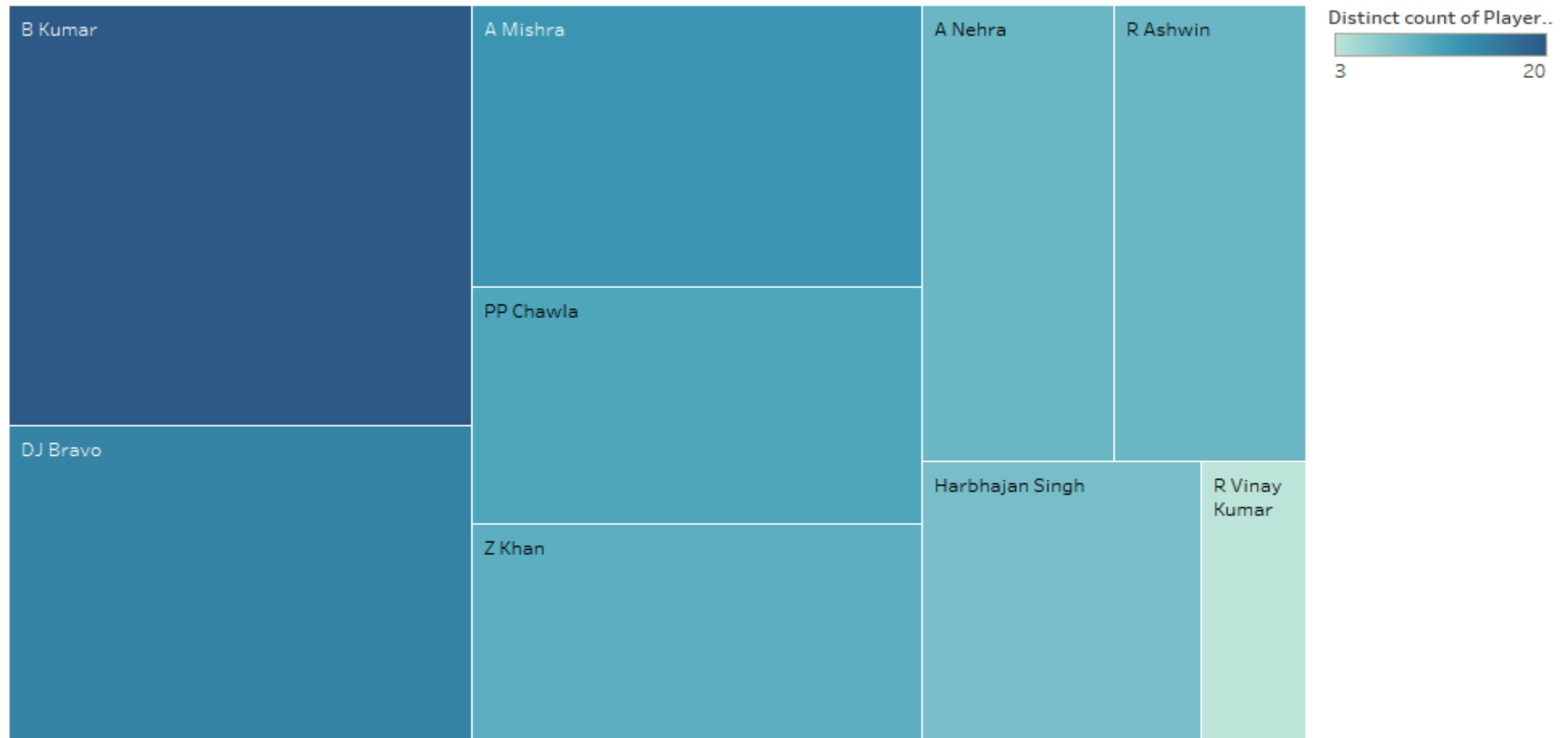


Batsman and sum of Batsman Runs. Color shows sum of Batsman Runs. Size shows sum of Batsman Runs. The marks are labeled by Batsman and sum of Batsman Runs. The data is filtered on Batting Team and Date Year. The Batting Team filter keeps 13 of 13 members. The Date Year filter keeps 2016. The view is filtered on Batsman, which keeps 10 of 461 members.

# Purple Cap contenders

- Purple Cap contenders list (The bowlers who have taken the maximum number of wickets in a particular season) for the **year 2016** can be seen where **BHUVANESHWAR KUMAR** leads the charts with **20 wickets**.
- Information on Top contenders and the winner for purple cap holders for each season can also be known using date and dismissal as filters.

## Purple Cap contenders



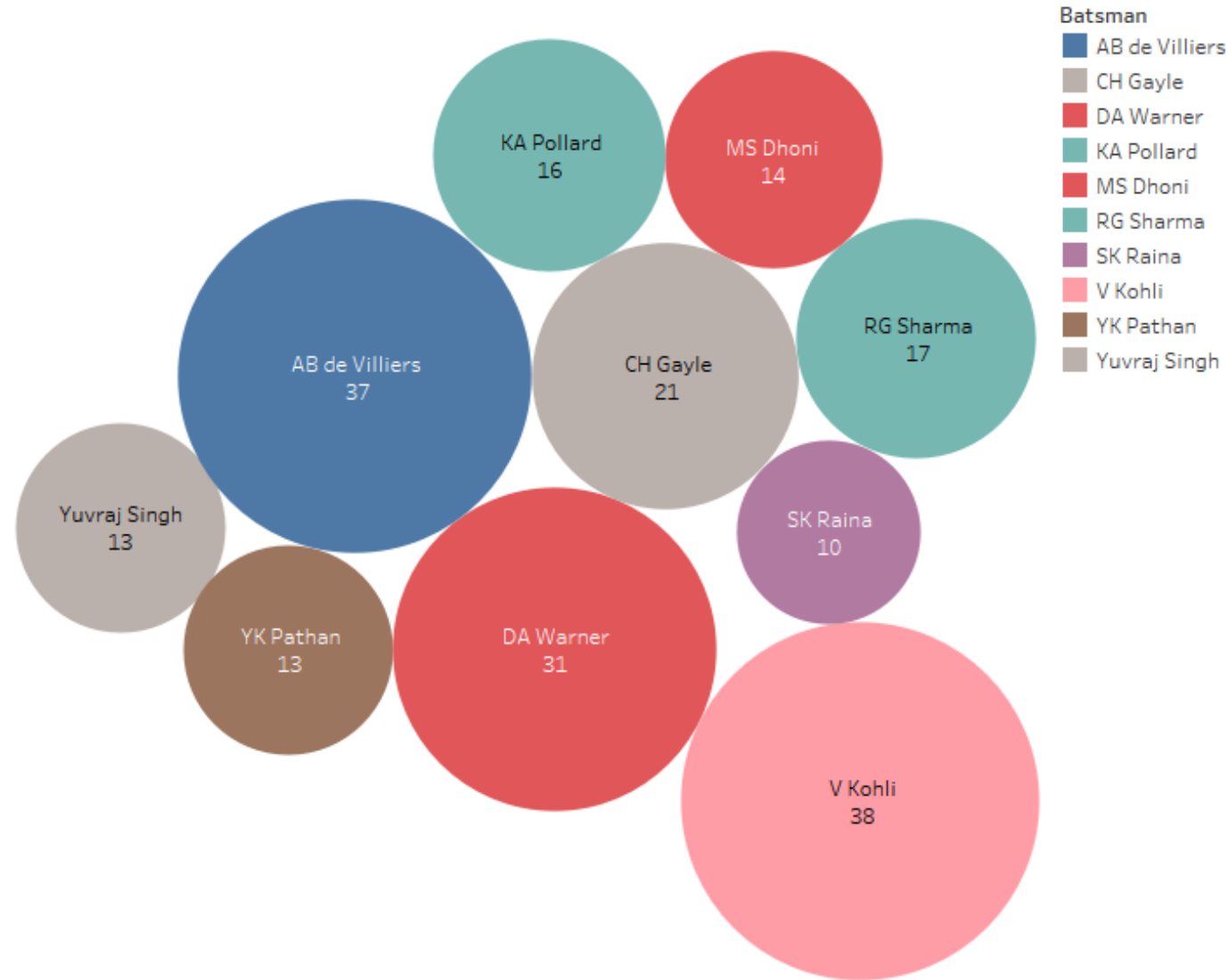
Bowler. Color shows distinct count of Player Dismissed. Size shows distinct count of Player Dismissed. The marks are labeled by Bowler. The data is filtered on Date Year and Dismissal Kind. The Date Year filter keeps 2016. The Dismissal Kind filter excludes obstructing the field, retired hurt and run out. The view is filtered on Bowler, which keeps 10 of 356 members.



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

- Infographics on batsmen who have hit the most number of sixes (per season and overall) can be seen in the bubble chart where **VIRAT KOLHI, ABD VILLIERS & DAVID WARNER** top the charts respectively with **38,37,31** sixes respectively.
- Using the date as filter top ten batsmen to hit most number of sixes for the season can be found out for that particular IPL season and also overall.

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

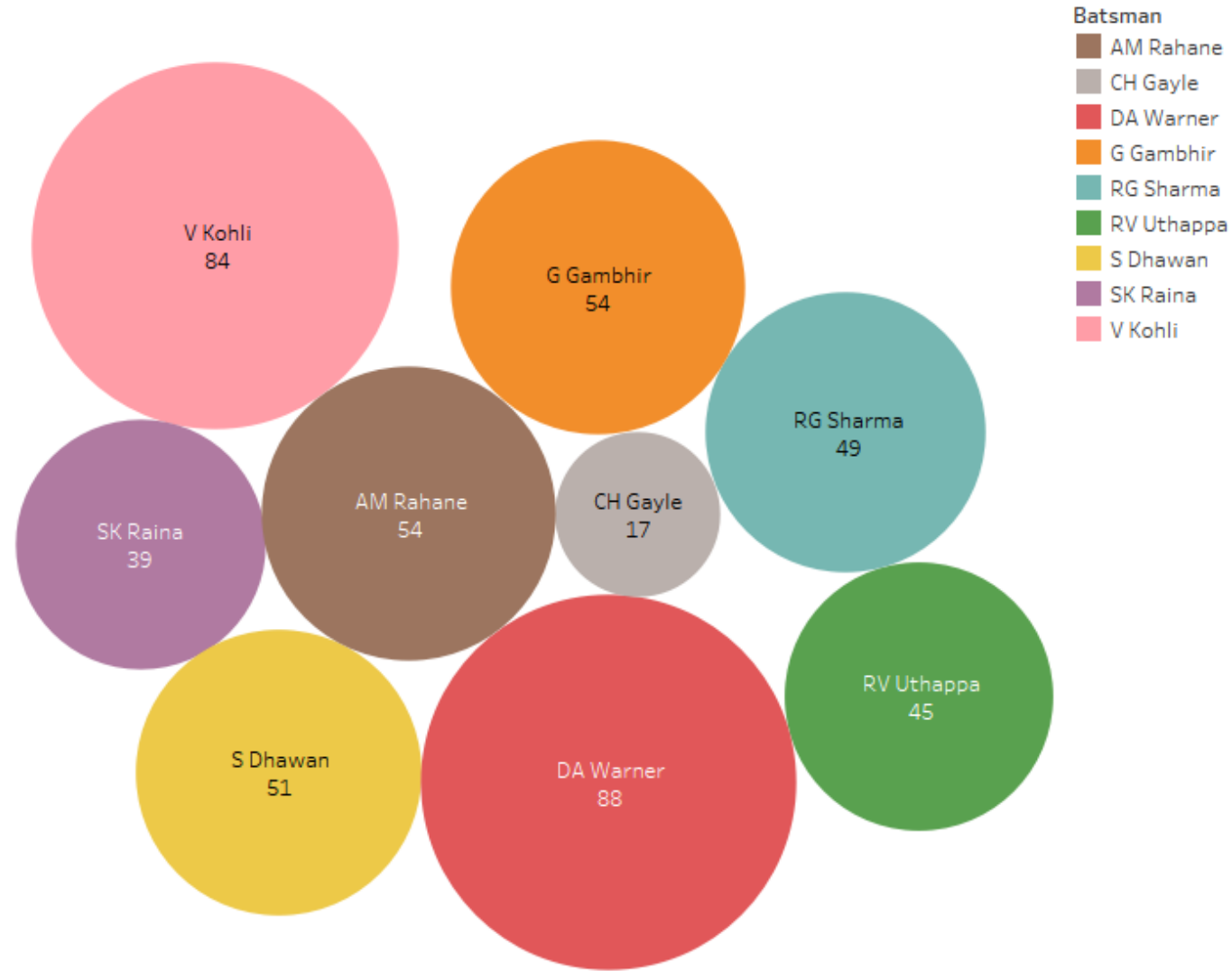


Batsman and Sixes. Color shows details about Batsman. Size shows Sixes. The marks are labeled by Batsman and Sixes. The data is filtered on Batting Team, Bowling Team and Date Year. The Batting Team filter keeps 13 of 13 members. The Bowling Team filter keeps 13 of 13 members. The Date Year filter keeps 2016. The view is filtered on Batsman, which keeps 10 of 461 members.

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

- Infographics on batsmen who have hit the most number of fours (per season and overall) can be seen in the bubble chart where **VIRAT KOLHI, DAVID WARNER, AJINKYA RAHANE, GAUTAM GAMBHIR** top the charts respectively with **88,84,54,54** fours respectively.
- Using the date as filter top ten batsmen to hit most number of fours for the season can be found out for that particular IPL season and also overall.

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

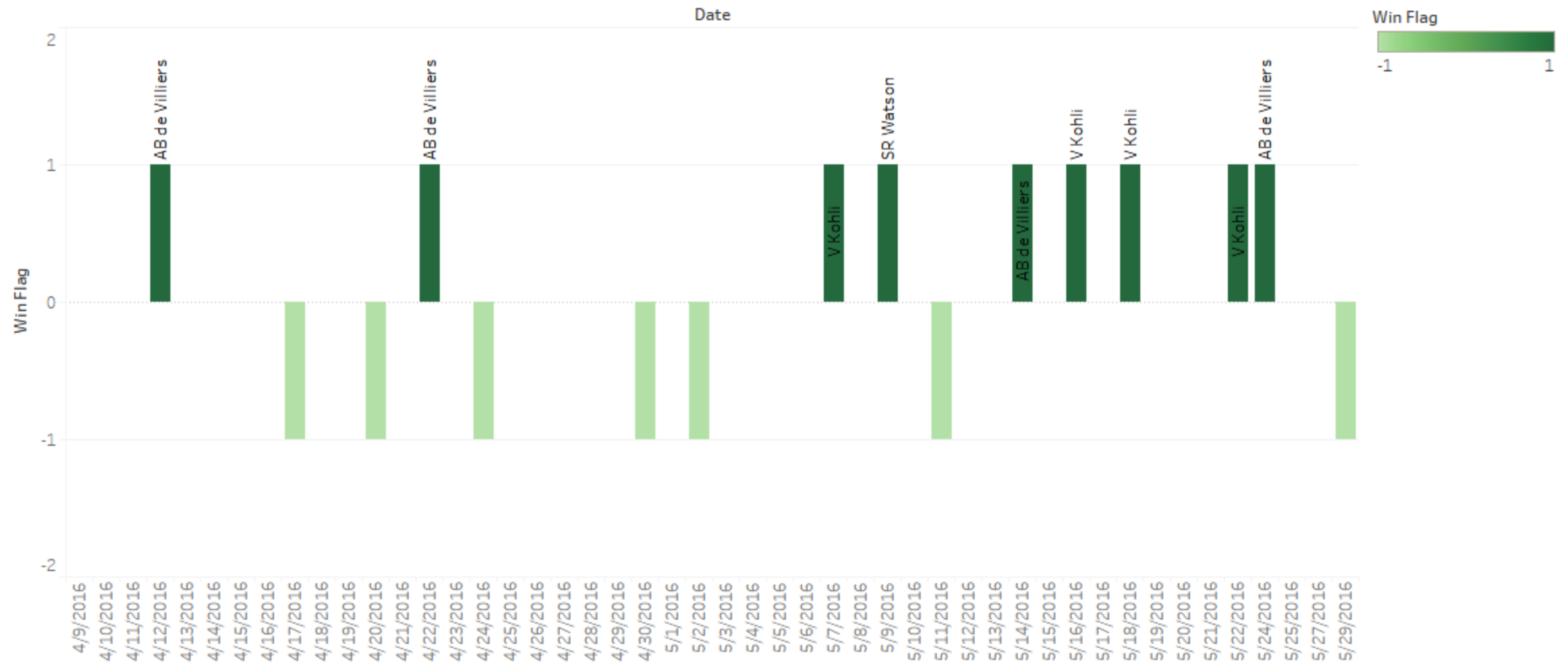


Batsman and Fours. Color shows details about Batsman. Size shows Fours. The marks are labeled by Batsman and Fours. The data is filtered on Batting Team, Bowling Team and Date Year. The Batting Team filter keeps 13 of 13 members. The Bowling Team filter keeps 13 of 13 members. The Date Year filter keeps 2016. The view is filtered on Batsman, which keeps 10 of 461 members.

# Season-wise team performance (wins vs losses)

- The next infographics shows the season wise team performance in wins and losses for a particular team.
- It also gives information on which team won which particular match in a particular team, and who was the man of the match for that particular match.
- Through filters we can select the team whose details we want to extract along with the season of choice.

## Season-wise team performance (wins vs losses)



Sum of Win Flag for each Date. Color shows sum of Win Flag. The marks are labeled by Man of the match. Details are shown for Id. The data is filtered on Date Year, which keeps 2016.

## Win % ( home vs away)

- In the table shown, is the information pertaining to the win percentage for **ROYAL CHALLENGERS BANGALORE(RCB)** for all the years of IPL season.
- RCB has highest winning percentage **at home ground** in the year **2013** ,i.e, **87.5%**, followed by the year **2011** with **83.33%**.
- RCB has **lost 71%** of its matches while playing **away from home** in the year **2015**.
- RCB has **100% won** all the matches when they played in **neutral venues in 2016**.

## Win % ( home vs away)

Year of Date	Home vs Away			NA
	Null	Away	Home	
2008		42.86%	14.29%	
2009				56.25%
2010		42.86%	57.14%	50.00%
2011		50.00%	83.33%	50.00%
2012		62.50%	42.86%	
2013		28.57%	87.50%	0.00%
2014		0.00%	40.00%	50.00%
2015		71.43%	28.57%	50.00%
2016		50.00%	55.56%	100.00%
2017		33.33%	16.67%	0.00%

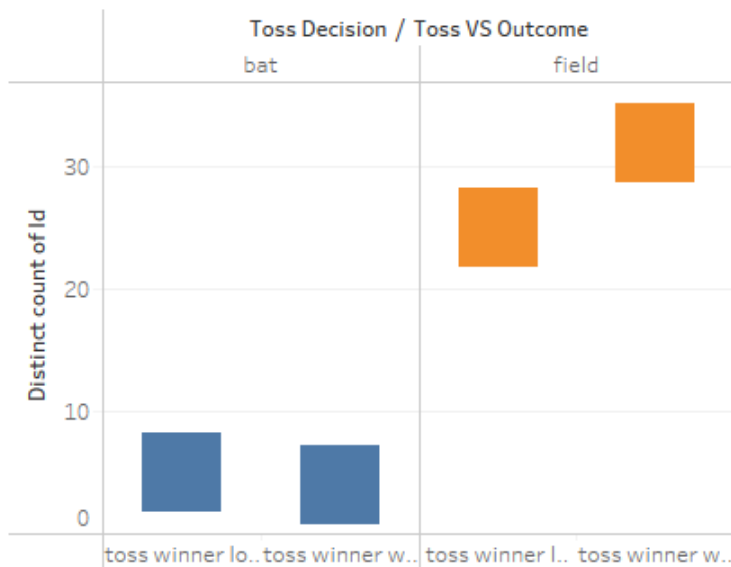
Win % broken down by Home vs Away vs. Date Year. The view is filtered on Home vs Away, which keeps Null, Away, Home and NA.



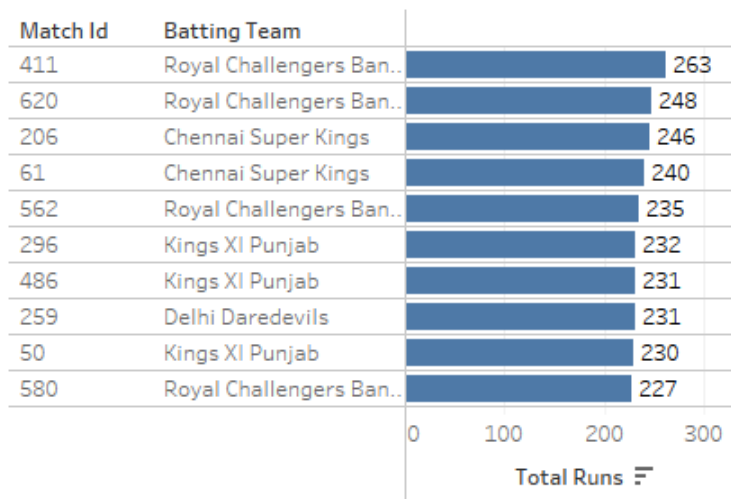
# DASHBOARDS

- The following are the 3 dashboards prepared using all the visuals that are plotted.
- All the required information can be obtained regarding **Match Statistics, Player Statistics, and Team Statistics** using filters.

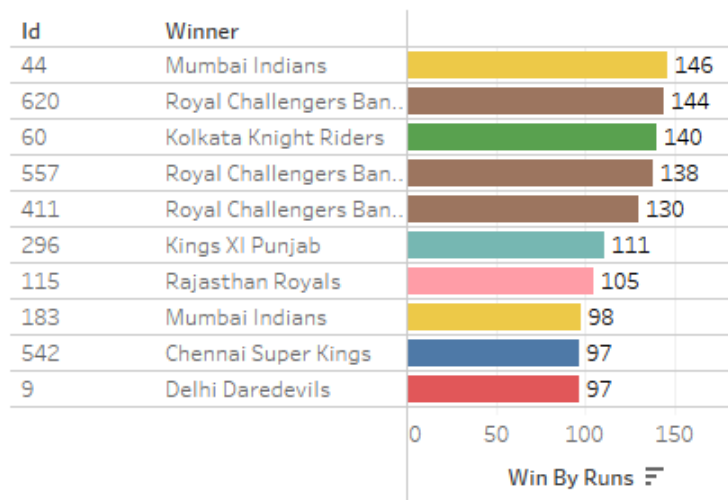
## Toss outcome vs Match outcome (for each Ground/Venue)



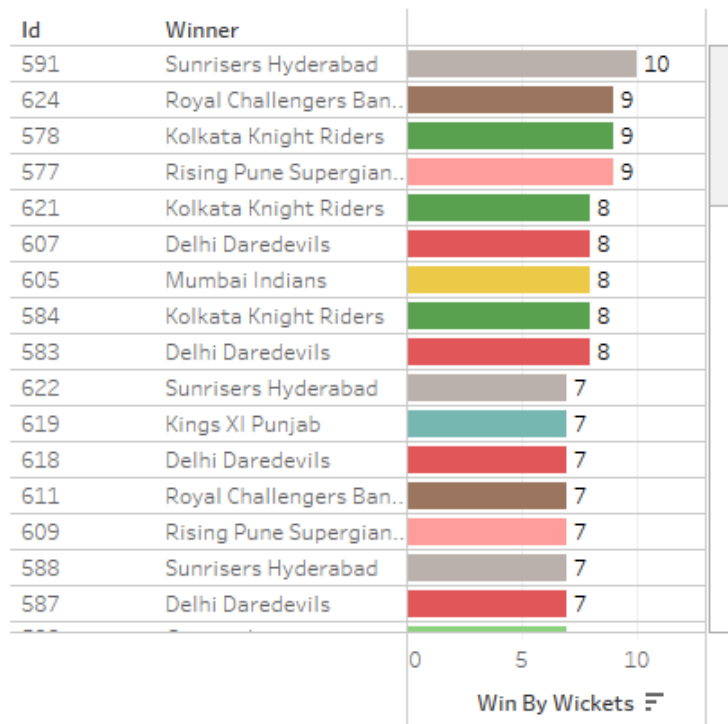
## Highest Totals



## Biggest wins (by runs)



## Biggest wins (by Wickets)



Venue

- Barabati Stadium
- Brabourne Stadium
- Buffalo Park
- De Beers Diamond Oval
- Dr DY Patil Sports Aca..
- Dr. Y.S. Rajasekhara R..
- Dubai International Cr..
- Eden Gardens
- Feroz Shah Kotla
- Green Park
- Himachal Pradesh Cri..
- Holkar Cricket Stadium
- ISCA International St

Toss Decision

- bat
- field

Id

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

Limit

Top 10 by SUM([Win By Runs])

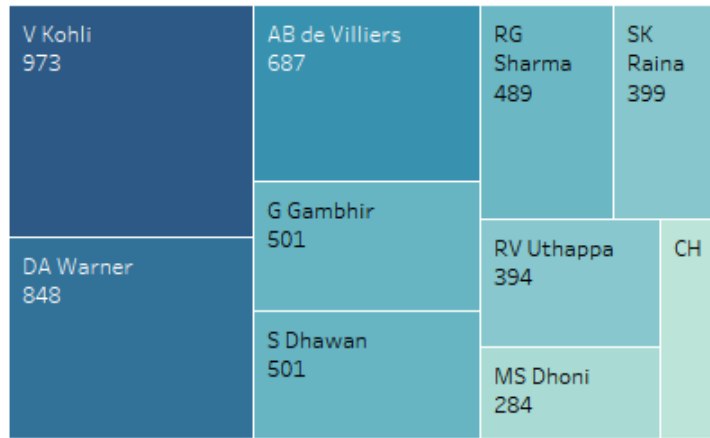
Winner

- Chennai Super Kings
- Delhi Daredevils
- Kings XI Punjab
- Kolkata Knight Riders
- Mumbai Indians
- Rajasthan Royals
- Royal Challengers Ba..

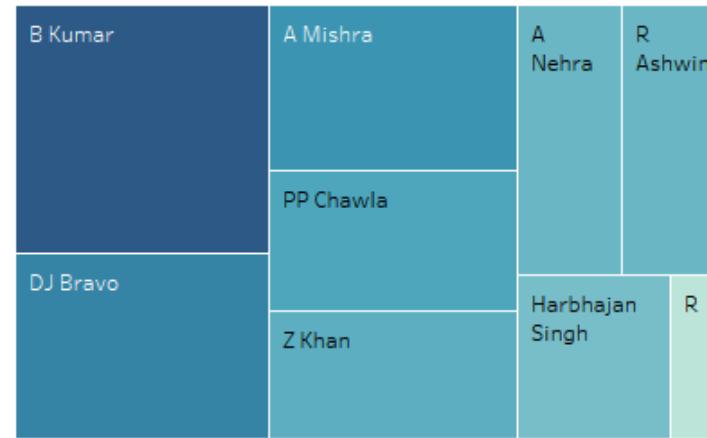
Season

2008 to 2017

## Orange Cap contenders



## Purple Cap contenders



Batsman

☒ A Ashish Reddy

Batting Team

☒ Chennai Super Kings

Year of Date

☐ 2008

Batsman Runs

227 973

Year of Date

☐ 2008

Bowler

☒ A Ashish Reddy

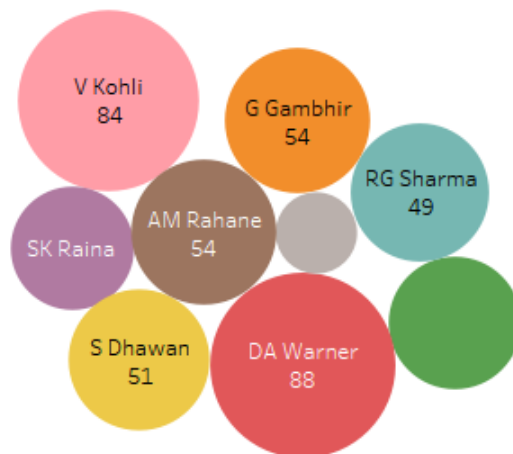
Dismissal Kind

☒ Null

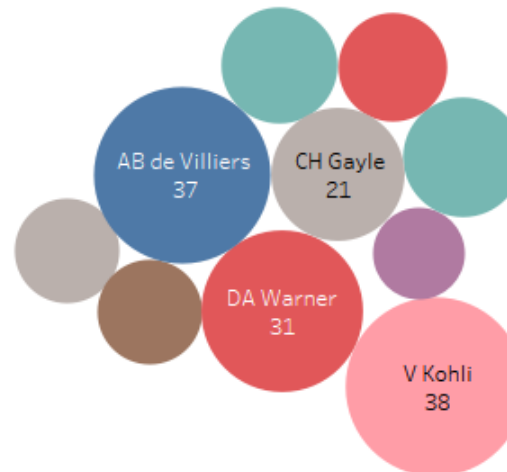
Distinct count of Player D..

3 20

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



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



Batsman

☒ A Ashish Reddy

Batting Team

☒ Chennai Super Kings

Bowling Team

☒ Chennai Super Kings

Year of Date

☐ 2008

Batsman

☒ AB de Villiers

Year of Date

☐ 2008

Bowling Team

☒ Chennai Super Kings

Batting Team

☒ Chennai Super Kings

Season-wise team performance (wins vs losses)

Win Flag

Year of Date

Win Flag

Teams

Home vs Away

Royal Challengers Banga..

Null

Away

Home

NA

## Win % ( home vs away)

Year of Date	Null	Home vs Away		NA
		Away	Home	
2008		42.86%	14.29%	
2009				56.25%
2010		42.86%	57.14%	50.00%
2011		50.00%	83.33%	50.00%
2012		62.50%	42.86%	
2013		28.57%	87.50%	0.00%
2014		0.00%	40.00%	50.00%
2015		71.43%	28.57%	50.00%
2016		50.00%	55.56%	100.00%
2017		33.33%	16.67%	0.00%

# APPENDIX: Data sources

**The data sources used to produce info graphics from tableau are:**

- **matches.csv** - It contains match-level information for each and every match held in IPL from 2008 to 2017.
- **deliveries.csv** - It contains ball-by-ball information for each of the matches.