

IPL Data Visualization

By Hetal Khanapure

Problem Statement

The Sports Editor of the News agency has approached 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. For this newsletter, in some cases, they will use the visual representations created in Tableau directly for their infographic, and in a few other cases, they will use important statistics after trying out the different filters and customizations that we provided for interactivity.

Dataset Given

- **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.

We divided the dashboard into 3 parts.

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)

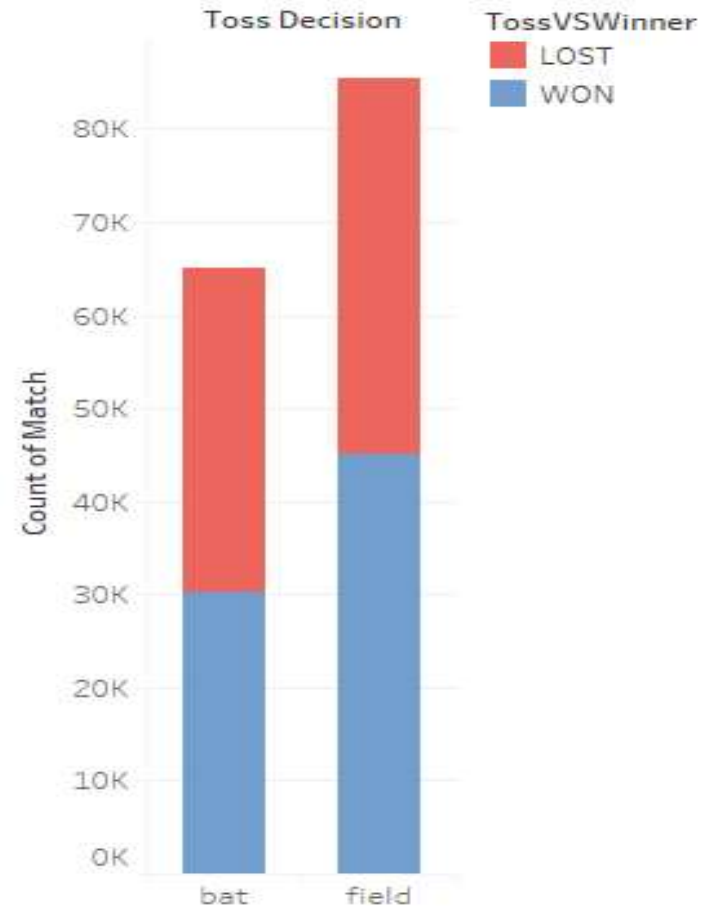
Toss outcome VS Match outcome

Displays Count of match for toss decision bat or field and how many matches toss winner team won or lost.

Given filter on dashboard to select Ground/venue to see the result for specific ground.

Outcome: It is seen the if toss winner team select to field they won most matches

Toss Outcome VS Match Outcome



Count of Match for each Toss Decision. Color shows details about TossVSWinner. The data is filtered on Venue, which keeps 35 of 35 members.

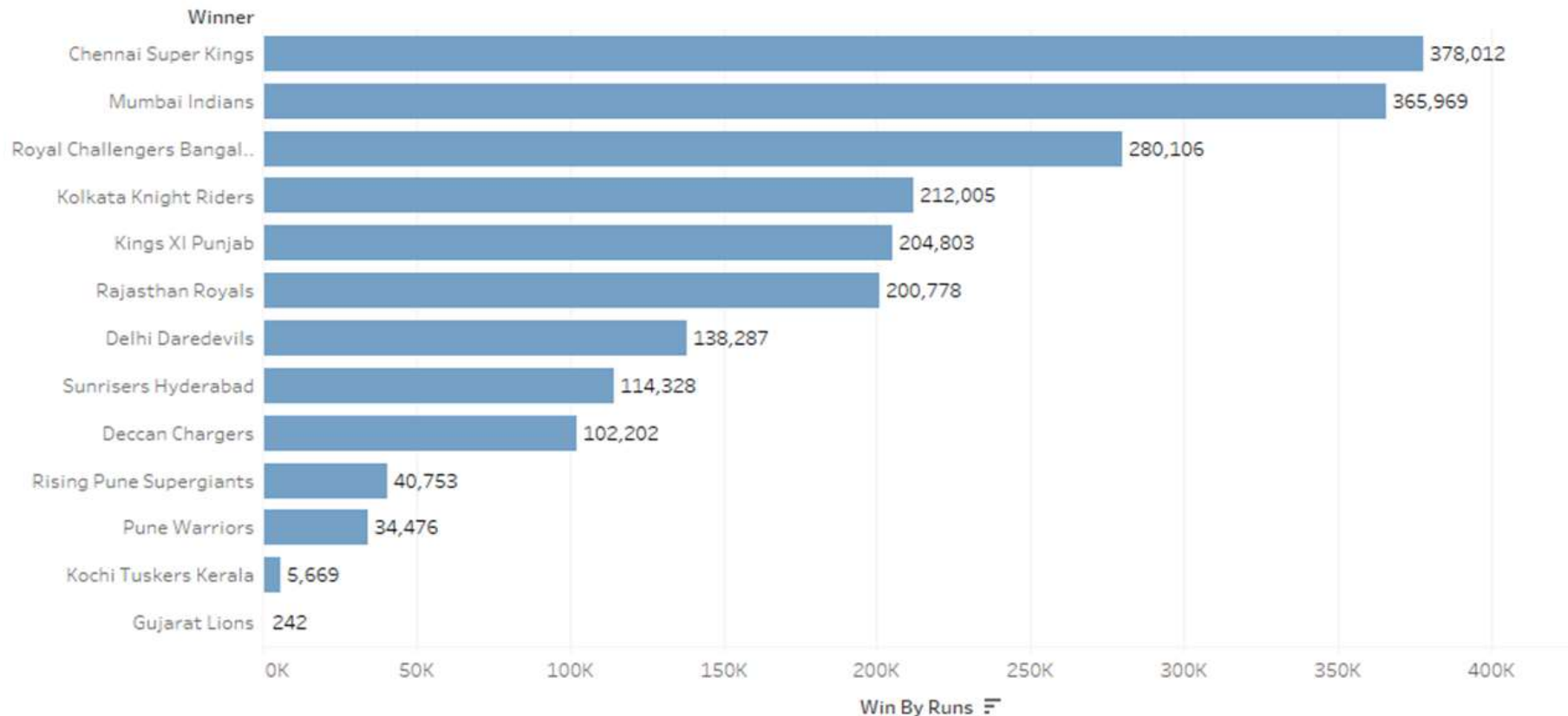
Biggest Win by Runs

A bar graph to show which team won by maximum total run across all season.

Outcome: Chennai super kings is at first place followed by Mumbai Indians and Royal challengers Bangalore across all season.

Season filter given on dashboard.

Biggest Win by Runs

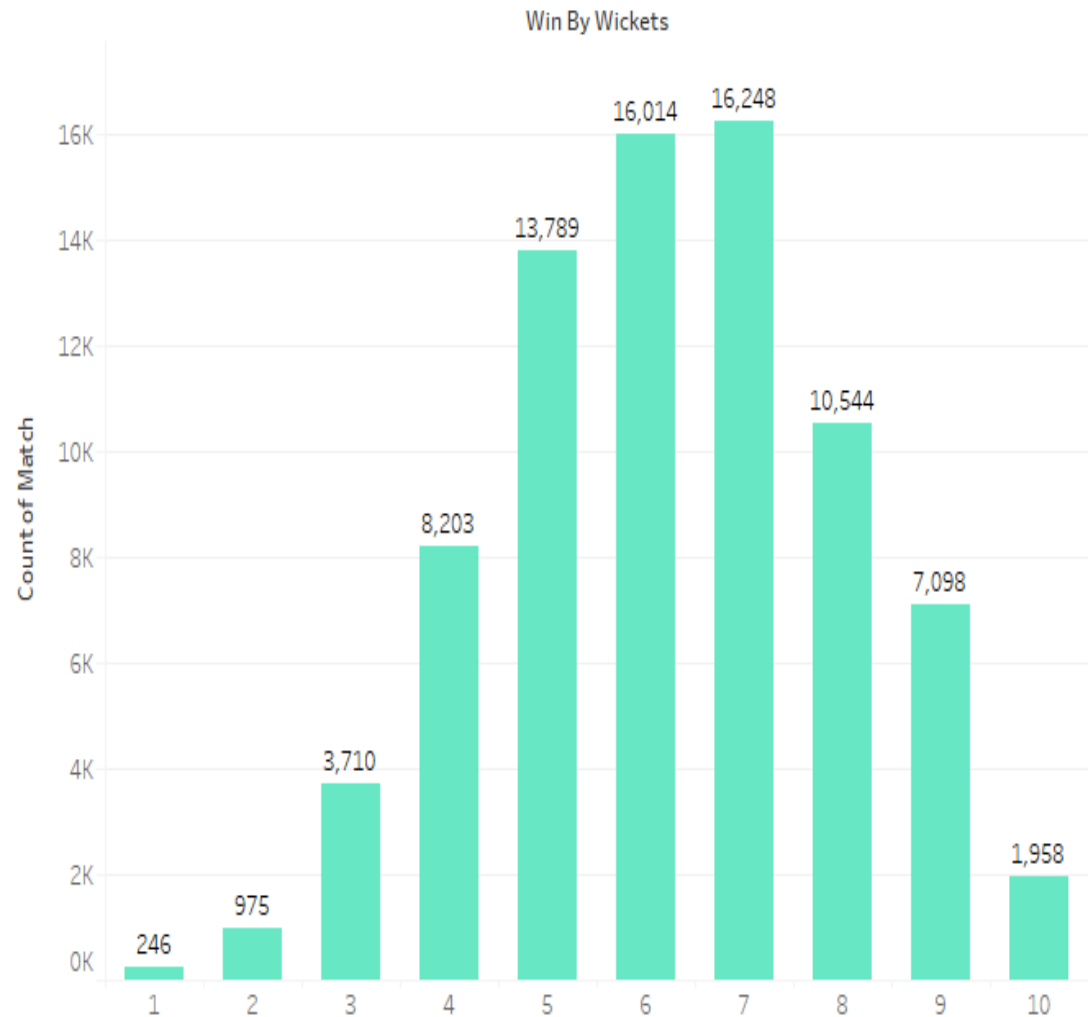


Biggest win by wickets

a bar graph to show
biggest win by wickets
across all season

Outcome: win by 7 wickets
is the most followed by 6
and 5

Biggest Win by Wickets

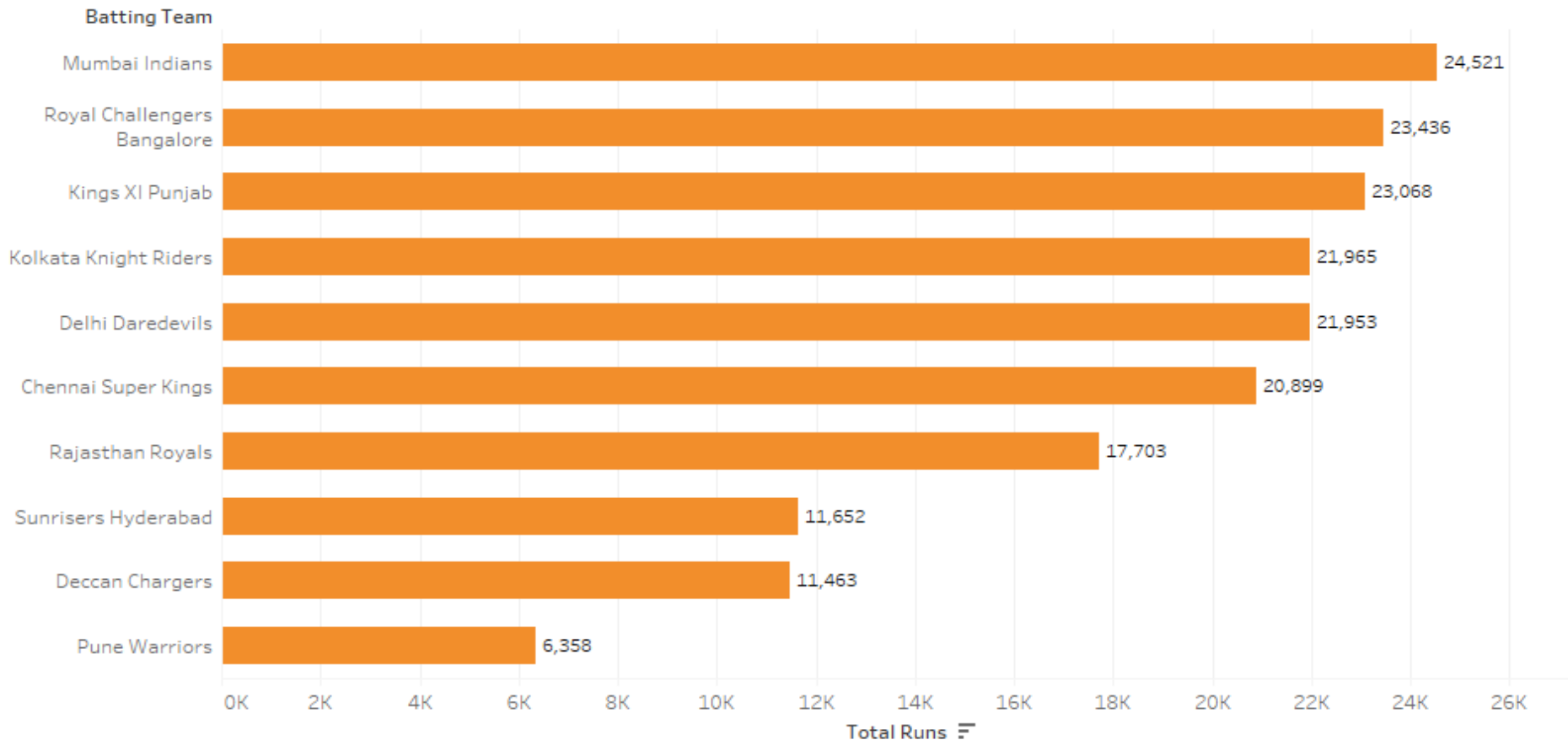


Highest Total

Plot a bar graph to check which team score highest across all season

Outcome: mumbai indians scored highest followed by royal challengers bangalore

Highest Total

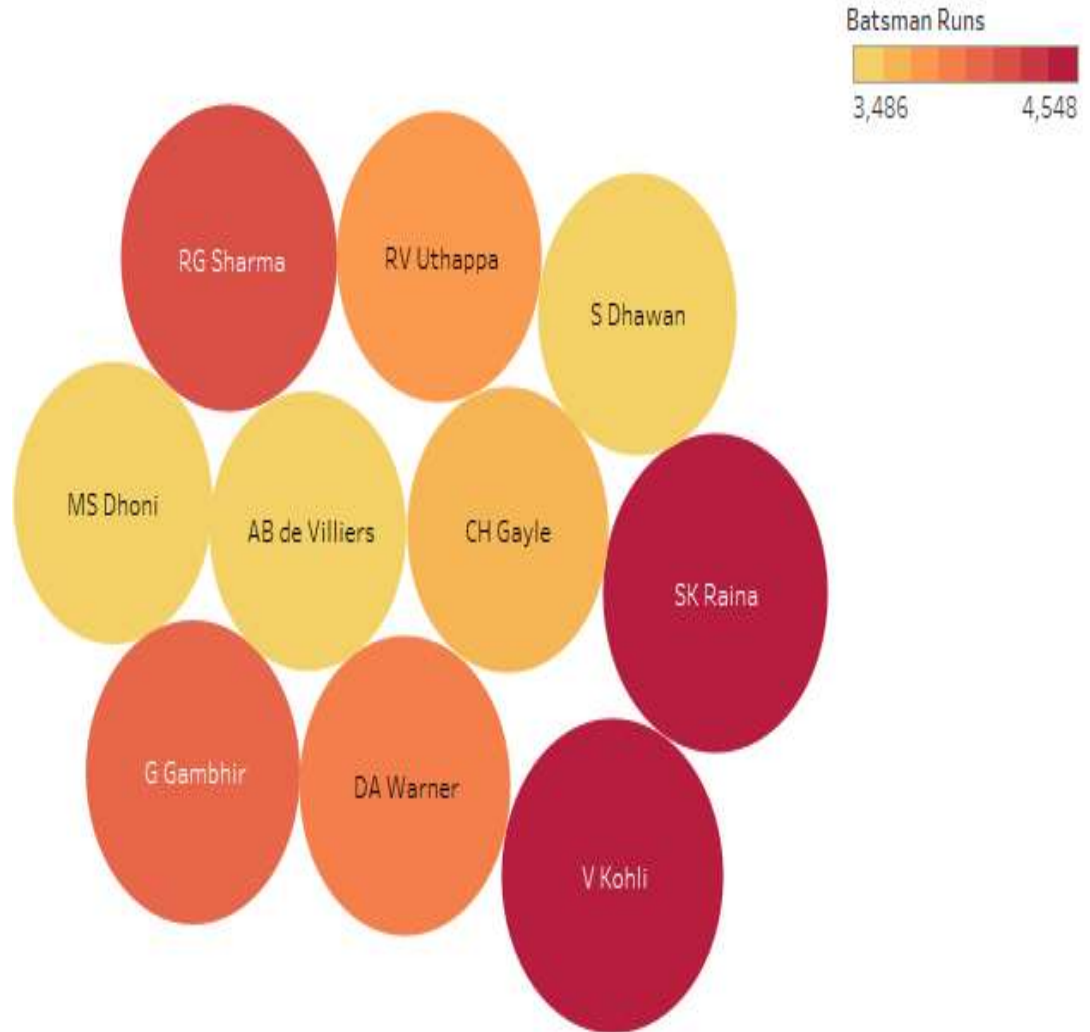


Orange Cap Contenders

Orange Cap Contenders

Plot bubble chart to show the top 10 players who got orange cap in a particular season.

Season filter given on dashboard to get result for any particular season



Purple Cap Contenders

Purple Cap contenders

Plot a bubble chart to show the bowlers who took more wickets and are purple cap winners.

Season filter is given on dashboard.

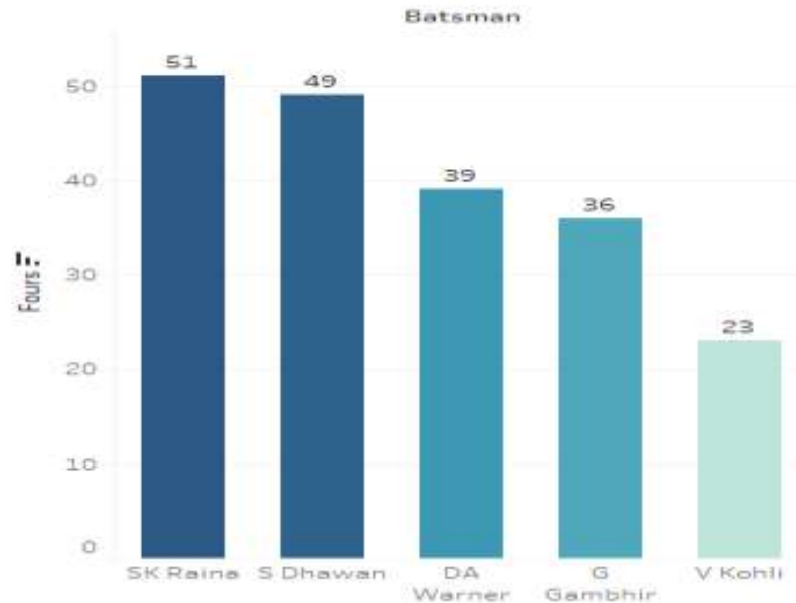


Batsman hits more 4s and 6s

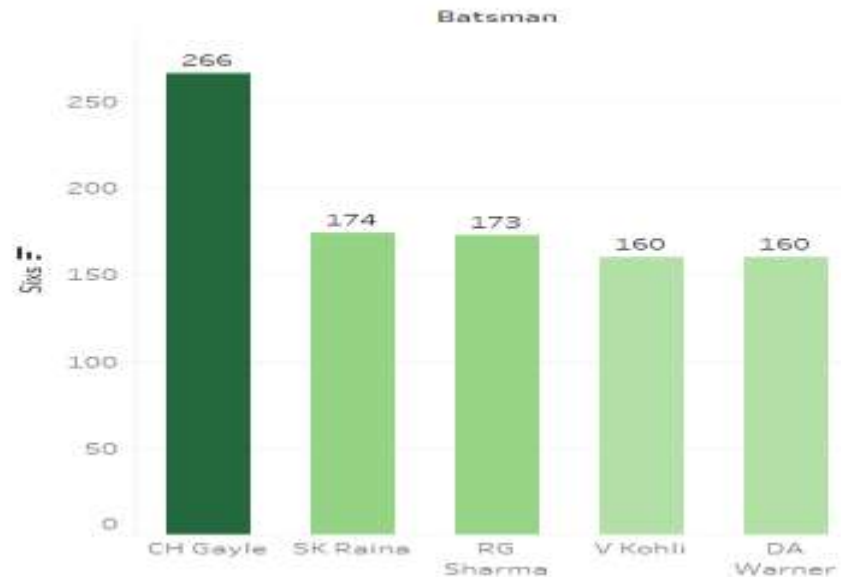
Plot a bar chart to show which top 5 batsman hit maximum 4s and 6s.

Season filter is given to check the season wise data.

Batsman hits most 4s



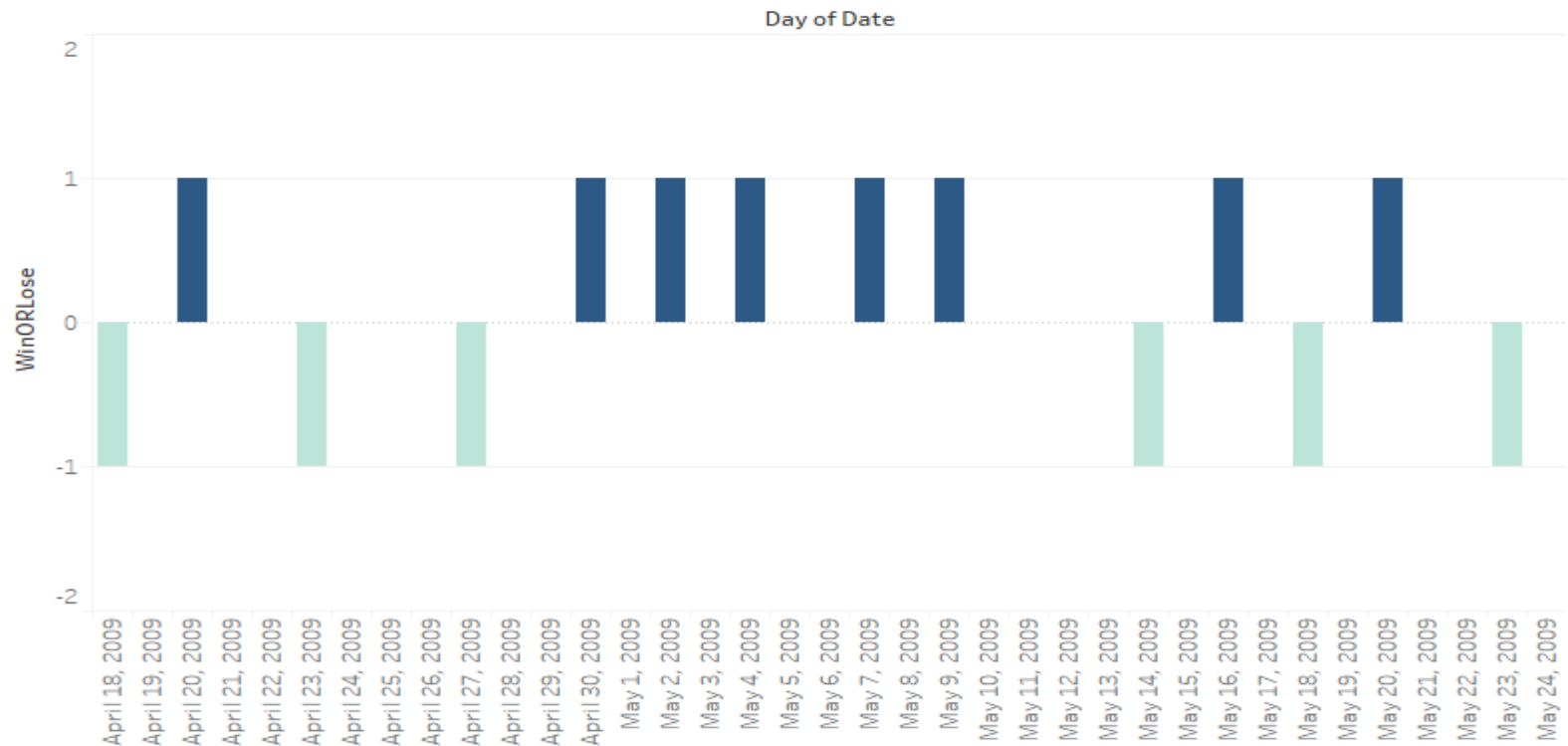
Batsman hits most 6s



Team performance

Plot a bar chart which shows date wise win or lose match for particular team. Season filter is given to check view for different season . Also the team filter is given to change the Team

Team Performance of Chennai Super Kings



Win percentage

Plot a highlighted table to display win percentage of particular team when they play At Home or Away

Filter is given on Team and season.

Win percentage of Mumbai Indians

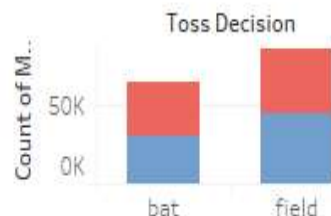
Home OR Away	Date									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AWAY	41.5%		50.0%	68.4%	85.6%	37.9%	100.0%	56.8%	66.8%	66.6%
HOME	53.3%		80.2%	67.7%	37.8%	100.0%	66.3%	63.2%	50.1%	62.3%
NA		38.0%		0.0%	49.4%	68.0%	0.0%	100.0%	25.6%	100.0%

Dashboard 1 : Match Statistics

Match Statistics

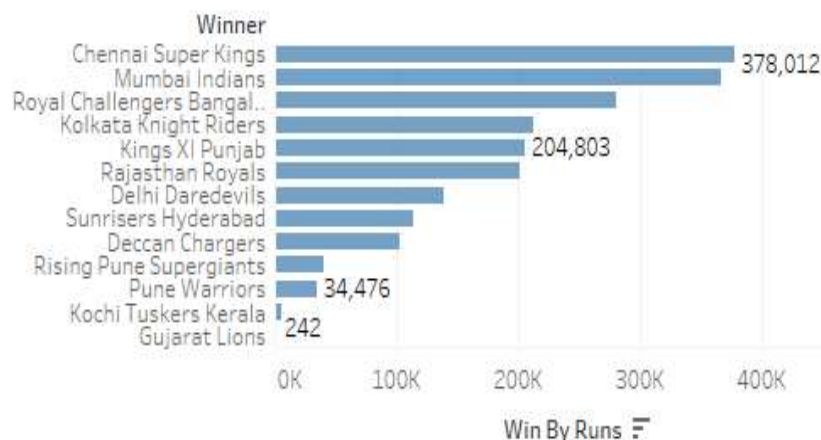
Toss Outcome VS Match

Outcome

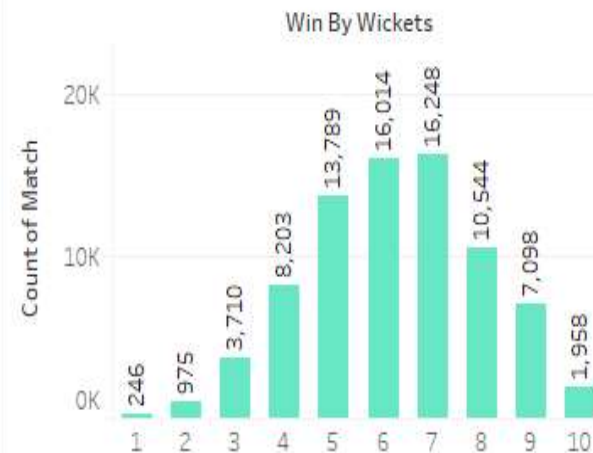


Count of Match for each Toss Decision. Color shows details about TossVSWinner. The data is filtered on Venue, which keeps 35 of 35 members.

Biggest Win by Runs



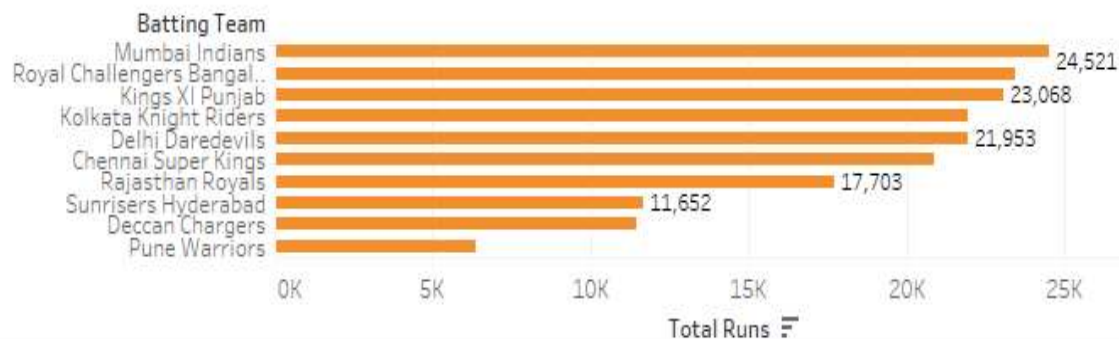
Biggest Win by Wickets



Venue

- ☒ Barabati Stadium
- ☒ Brabourne Stadium
- ☒ Buffalo Park
- ☒ De Beers Diamond Oval
- ☒ Dr DY Patil Sports Academy
- ☒ Dr. Y.S. Rajasekhara Reddy ACA-V..
- ☒ Dubai International Cricket Stadi..
- ☒ Eden Gardens
- ☒ Feroz Shah Kotla
- ☒ Green Park
- ☒ Himachal Pradesh Cricket Associa

Highest Total



Season

- ☒ 2008
- ☒ 2009
- ☒ 2010
- ☒ 2011
- ☒ 2012
- ☒ 2013
- ☒ 2014
- ☒ 2015
- ☒ 2016
- ☒ 2017

Dashboard 2 : Player Statistics

Player Statistics

Orange Cap Contenders



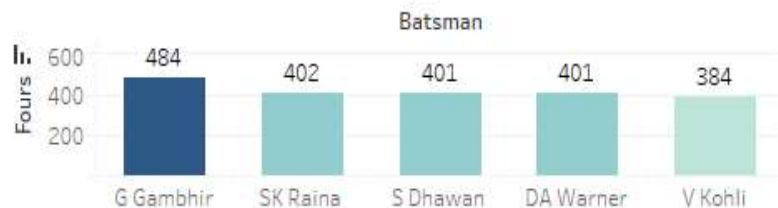
color and size shows the maximum runs made by batsman. Filtered by season.

Purple Cap Contenders



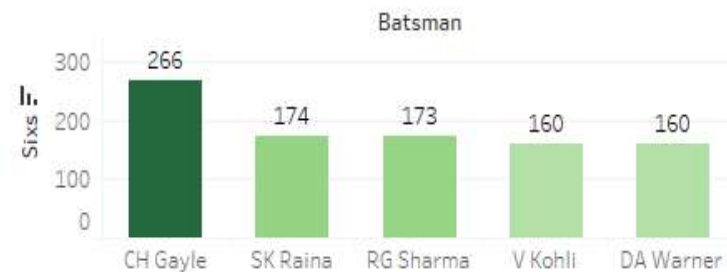
Color and size shows count of wickets taken by bowler. Filtered by season

Batsman hits most 4s



Sum of Fours for each Batsman. Color vary from dark to light as total fours decrease. The marks are labeled by sum of Fours. The data is filtered on Season

Batsman hits most 6s



Top 5 batsman who hits most 6s filtered by season.

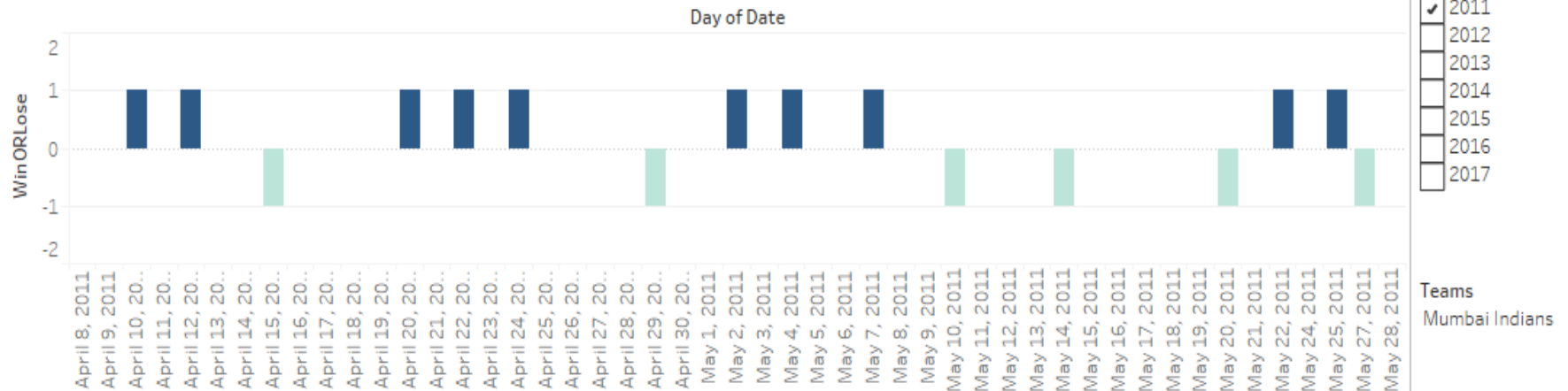
Season

- ☒ 2008
- ☒ 2009
- ☒ 2010
- ☒ 2011
- ☒ 2012
- ☒ 2013
- ☒ 2014
- ☒ 2015
- ☒ 2016
- ☒ 2017

Dashboard 3 : Team Statistics

Team Statistics

Team Performance of Mumbai Indians



Win OR Lose for each Day. Color shows details about Win OR Lose the match. The data is filtered on Season and Teams. 1 denotes win and -1 denotes lost the match.

Win percentage of Mumbai Indians

		Date									
Home OR Away		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
AWAY		41.5%		50.0%	68.4%	85.6%	37.9%	100.0%	56.8%	66.8%	66.6%
HOME		53.3%		80.2%	67.7%	37.8%	100.0%	66.3%	63.2%	50.1%	62.3%
NA			38.0%		0.0%	49.4%	68.0%	0.0%	100.0%	25.6%	100.0%

Home OR Away

- ☐ Null
- ☒ AWAY
- ☒ HOME
- ☒ NA

Win percentage broken down by Date Year vs. Home OR Away. Color shows Win percentage. The marks are labeled by Win percentage. The view is filtered on Home OR Away, which keeps AWAY, HOME and NA.