IPL performance and salary analysis report

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INTRODUCTION

My project contains 4 parts:

1. Team wise performance analysis
2. Individual player wise performance analysis
3. Salary wise analysis
4. Star player analysis

ABOUT THE DATA SET

I am working with 2 datasets, which are:

1. IPL (2008 -2019) Dataset

2. IPL Player Performance and Salary Dataset

IPL (2008 -2019) Dataset contains 2 csv files: i.deleveries.csv: it contains all the delivery-wise data of all the matches - match id, inning, batting team, bowling team, over number, batsman name,non-striker batsman name, bowler name, runs in that delivery, wickets fallen in that delivery, and the winner of that match.

ii.matches.csv: it contains all the match-wise data of all the matches - id,season,date,team 1, team 2, toss winner, toss decision,result,win by runs,win by wickets,venue,player of the match,umpires

WORKING VARIABLES

Variable_Name	Variable_Type	Variable_Description
batting_team	Categorical (Nominal)	batsman's team name
bowling_team	Categorical (Nominal)	bowler's team name
batsman	Categorical (Nominal)	on strike batsman name
bowler	Categorical (Nominal)	bowler name
total_runs	Numeric(Discrete)	runs scored by batting team
batsman_runs	Numeric(Discrete)	runs scored by the batsman
season	Numeric(Discrete)	IPL season number
toss_decision	Categorical (Binary)	bat/field
player_of_match	Categorical (Nominal)	best player of the match

2. IPL Player Performance and Salary Dataset contains 1 csv file: salary.csv: it contains all the IPL season wise data of all the players - id, name,year,final price,role,nationality,team,Ent,age,matches,runs,High Score,Ave,Strike Rate,fifties,hundreds,fours,sixes,catches,stumps,wickets,economy,four wickets,five wickets,Indian,specialist,status.

WORKING VARIABLES

Variable_Name	Variable_Type	Variable_Description
Name	Categorical (Nominal)	Player name
Year	Numeric(Discrete)	IPL season year
Final Price	Numeric(Continuous)	Player's auction price of that season
Team	Categorical (Nominal)	Player's IPL team name
Runs	Numeric(Discrete)	Runs scored by player
StrRate	Numeric(Continuous)	Strike rate=(total run scored/total balls played)*100
Fifties	Numeric(Discrete)	No. of 50's scored by the player
Hundreds	Numeric(Discrete)	No. of 100's scored by the player
Fours	Numeric(Discrete)	No. of 4's scored by the player
Sixes	Numeric(Discrete)	No. of 6's scored by the player
Wkts	Numeric(Discrete)	No. of wickets taken by the player
FourWkts	Numeric(Discrete)	No. of times 4 wickets haul taken by the player
FiveWkts	Numeric(Discrete)	No. of times 5 wickets haul taken by the player

THE OBJECTIVE OF THE PROJECT

1. Team wise performance analysis:
   - Which team preferred batting or fielding after winning the tosses in IPL?
   - Which team scored how many boundaries, over-boundaries, centuries and half-centuries in IPL?
   - Which team took how many 4-wicket hauls and 5-wicket hauls in IPL?
2. Individual player wise performance analysis:
   - Performance analysis of player against other teams.
   - Innings wise performance analysis of player.
   - Performance analysis of player against the players he played most number of times.
3. Salary wise analysis:
   - Which players are receiving huge amount of money but performs not so good?

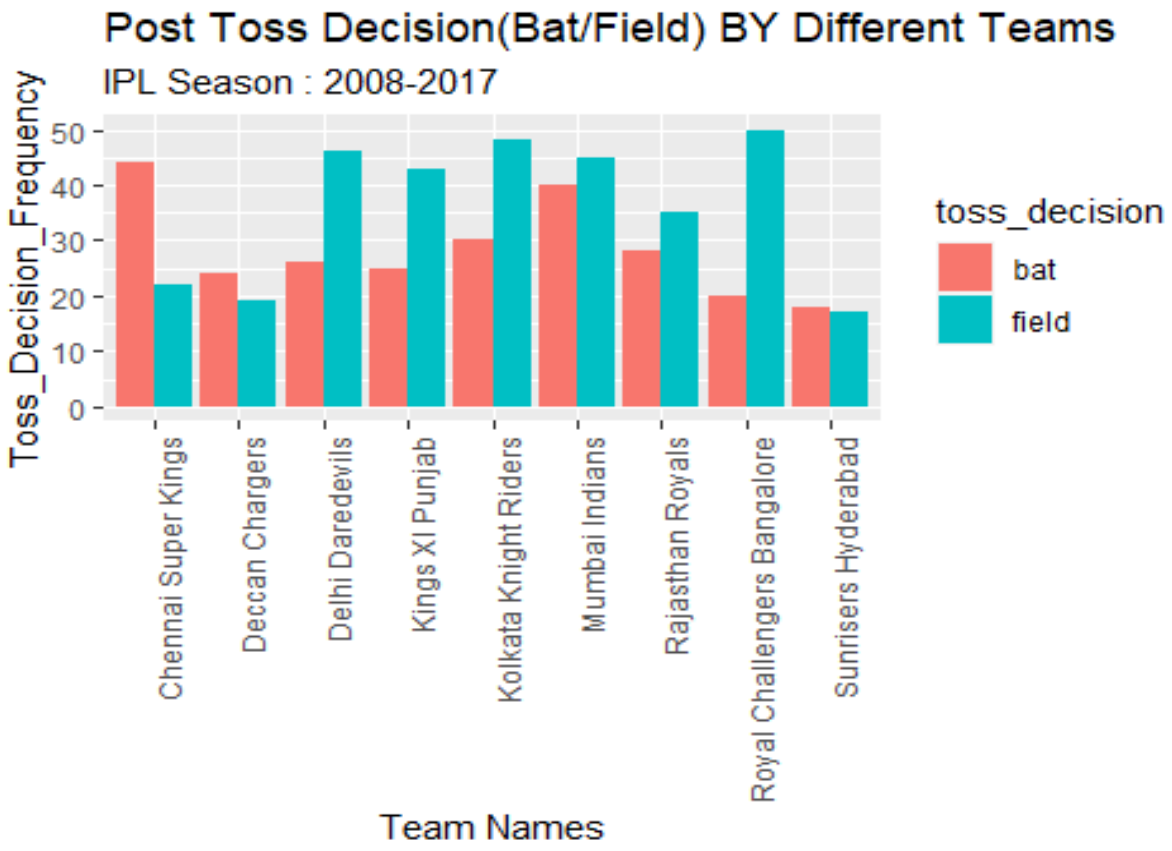
- Which players are receiving low amount of money but performs well?

4. Star player analysis:
   - Which players received player of the match award most number of times?
   - Highest run scorers.
   - Highest wicket takers.

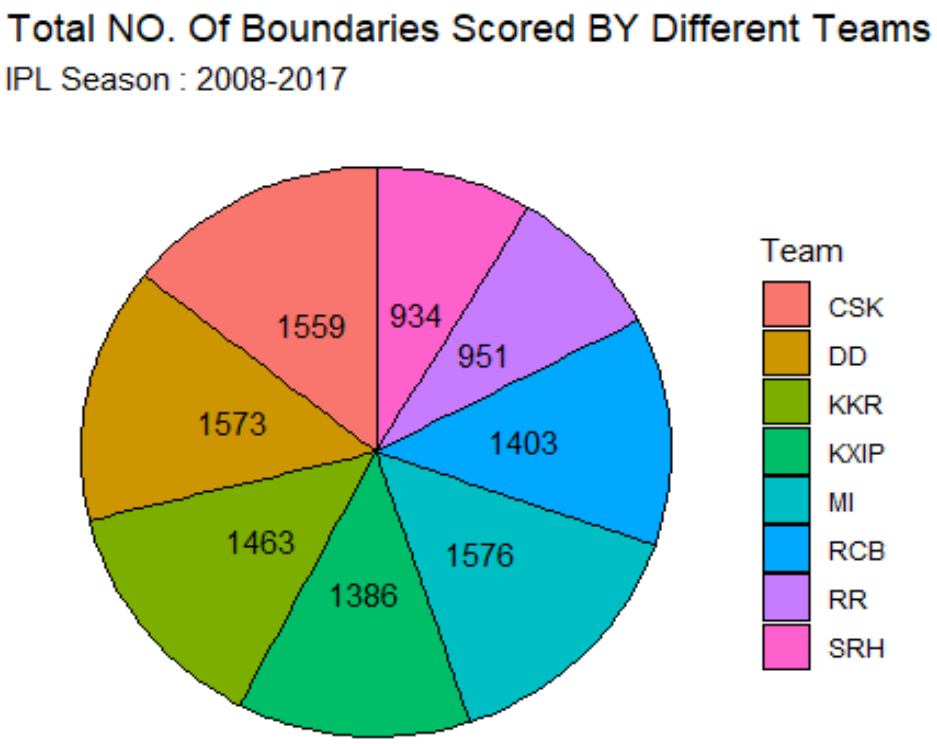
ANALYSIS

1. Team wise performance analysis:

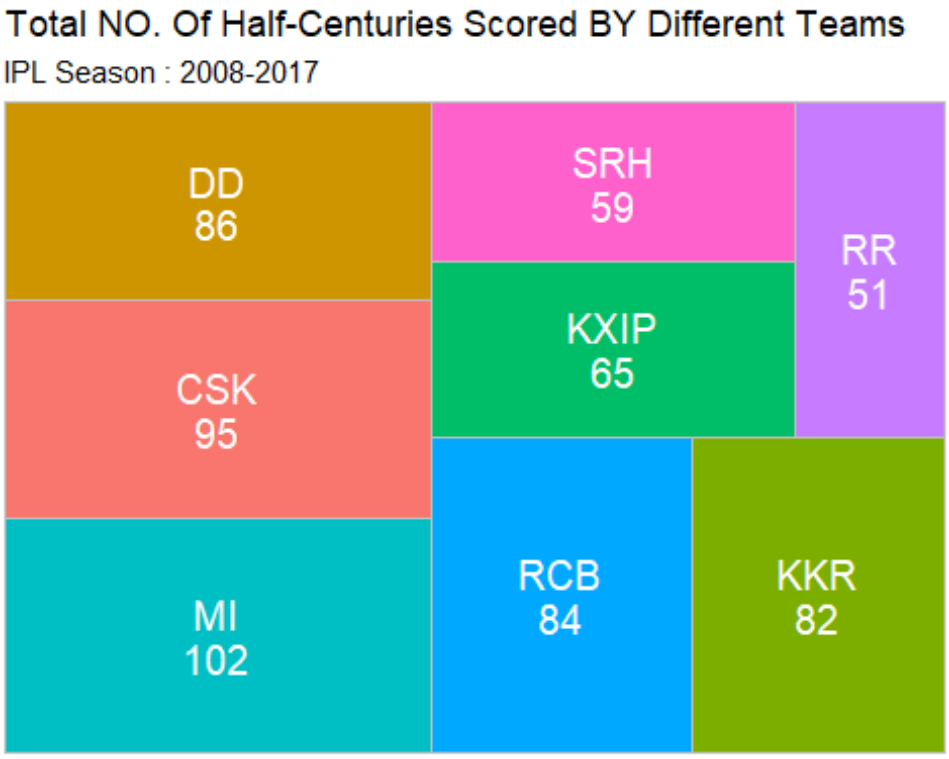
1.i> Which team preferred batting or fielding after winning the tosses in IPL ?



1.ii> Which team scored how many boundaries, over-boundaries, centuries and half-centuries in IPL ?

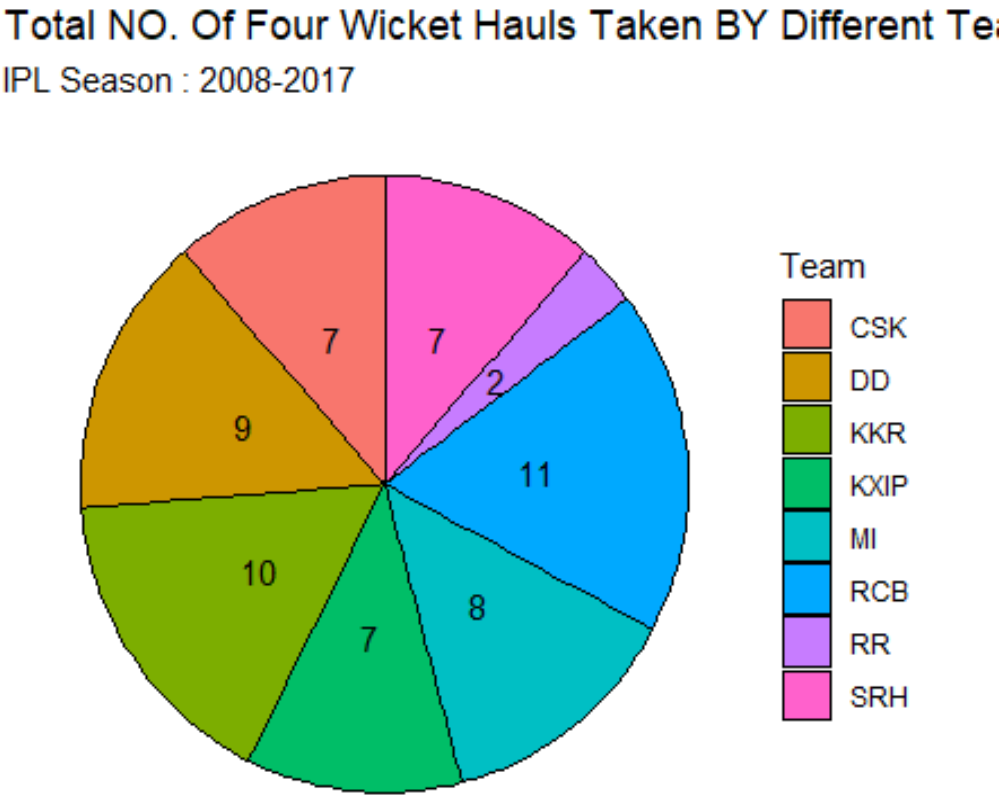


Total NO. Of Over-Boundaries Scored BY Different Teams will be represented by similar kind of pie diagram in the project.



Total NO. Of Centuries Scored BY Different Teams will be represented by similar kind of tree-map diagram in the project.

1.iii> Which team took how many 4-wicket hauls and 5-wicket hauls in IPL?

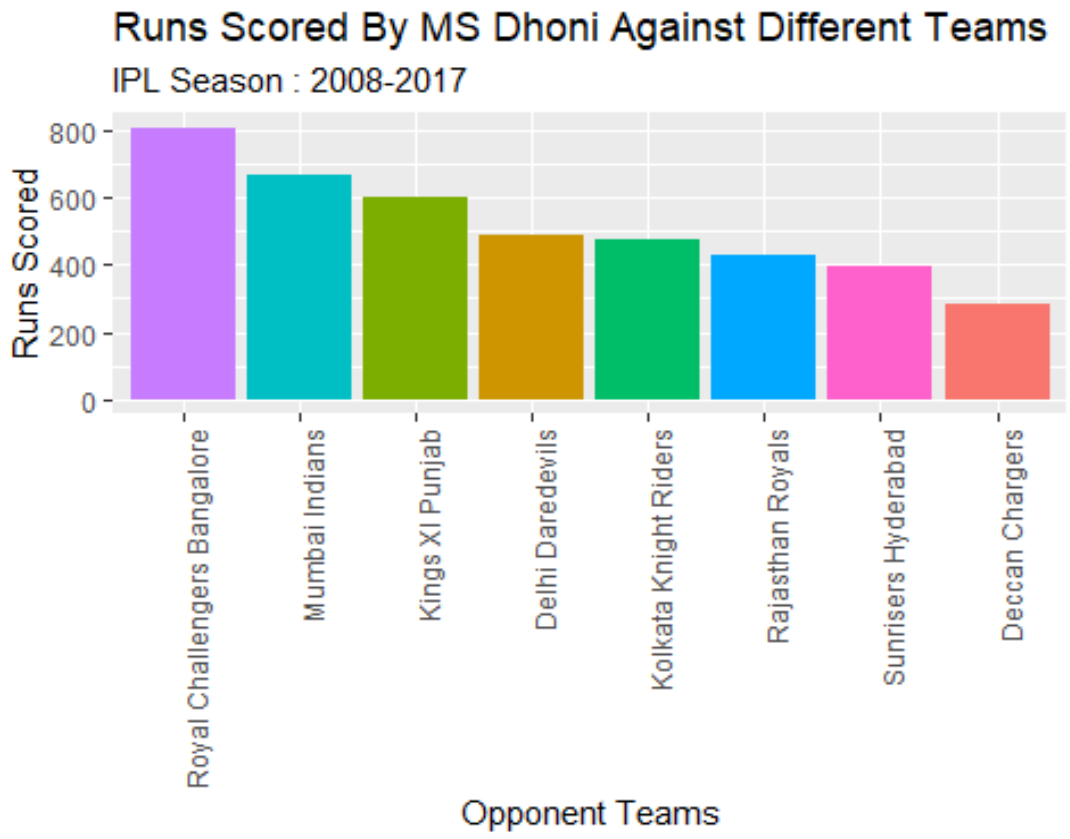


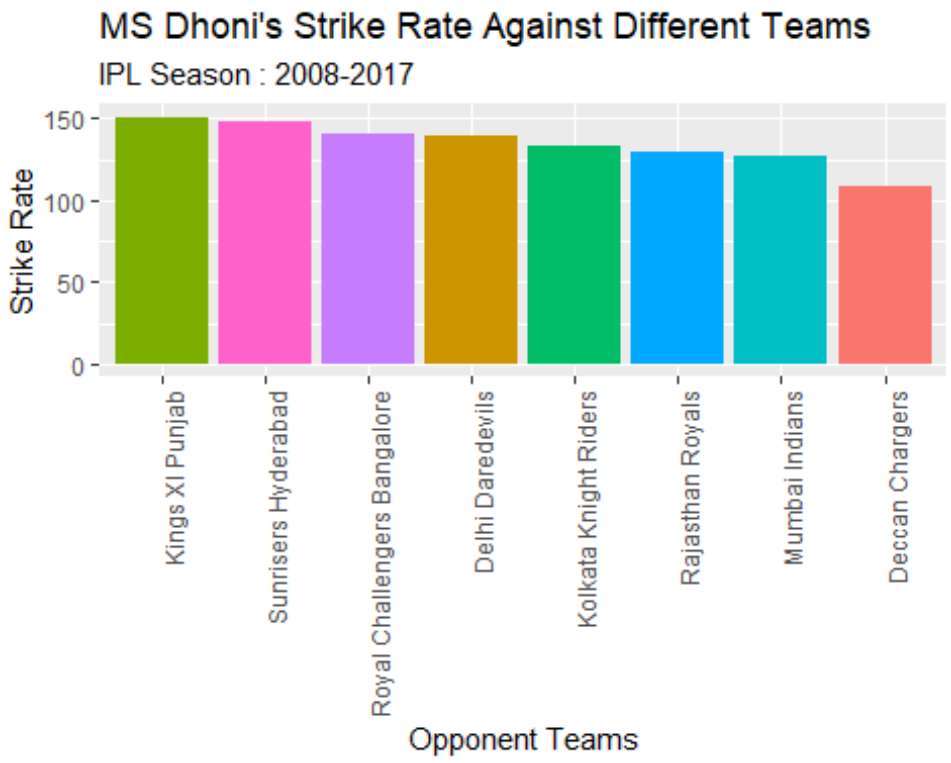
Total NO. Of Five Wicket Hauls Taken BY Different Teams will be represented by similar kind of pie diagram in the project.

2. Individual player wise performance analysis:(In this report we only consider one player's performance as an example of original project)

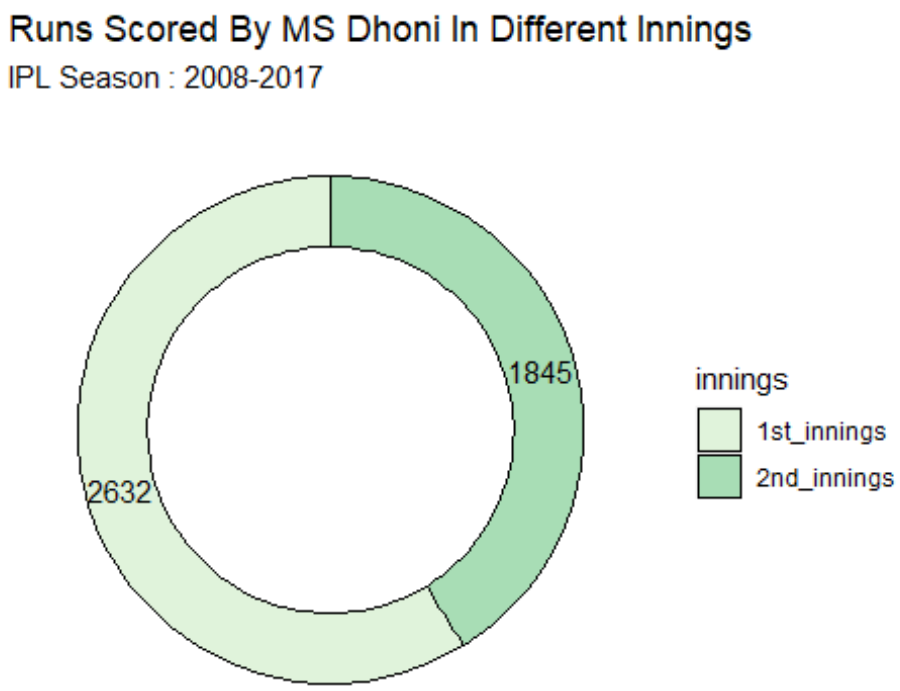
We choose MS Dhoni to analyze a batsman's performance in IPL

2.i> Performance analysis of player against other teams.

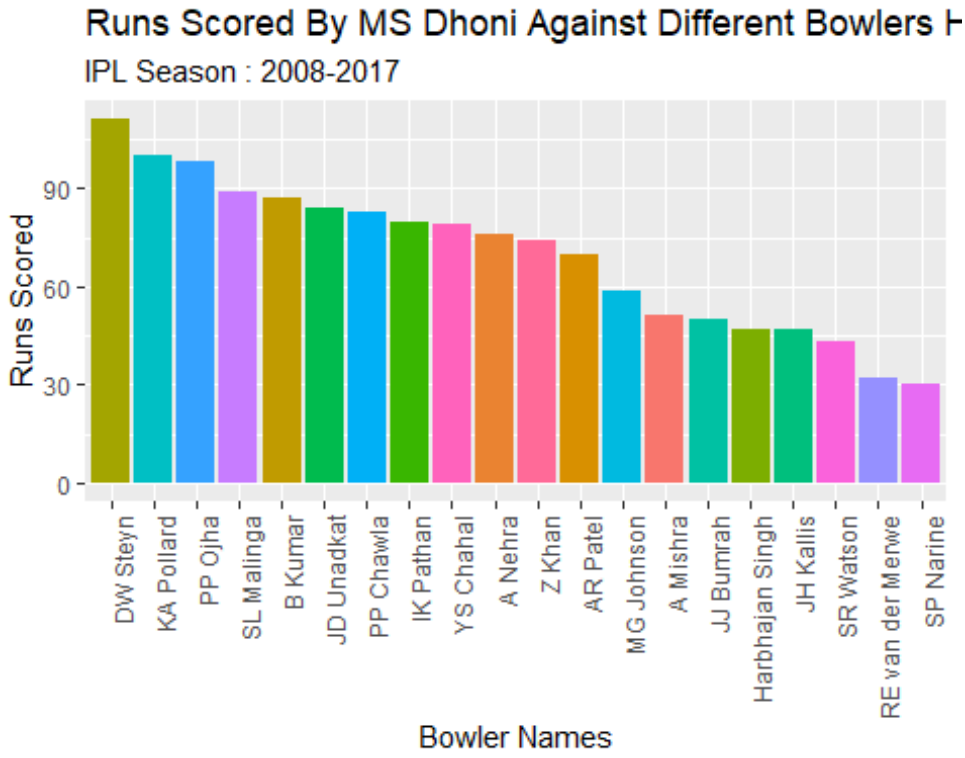


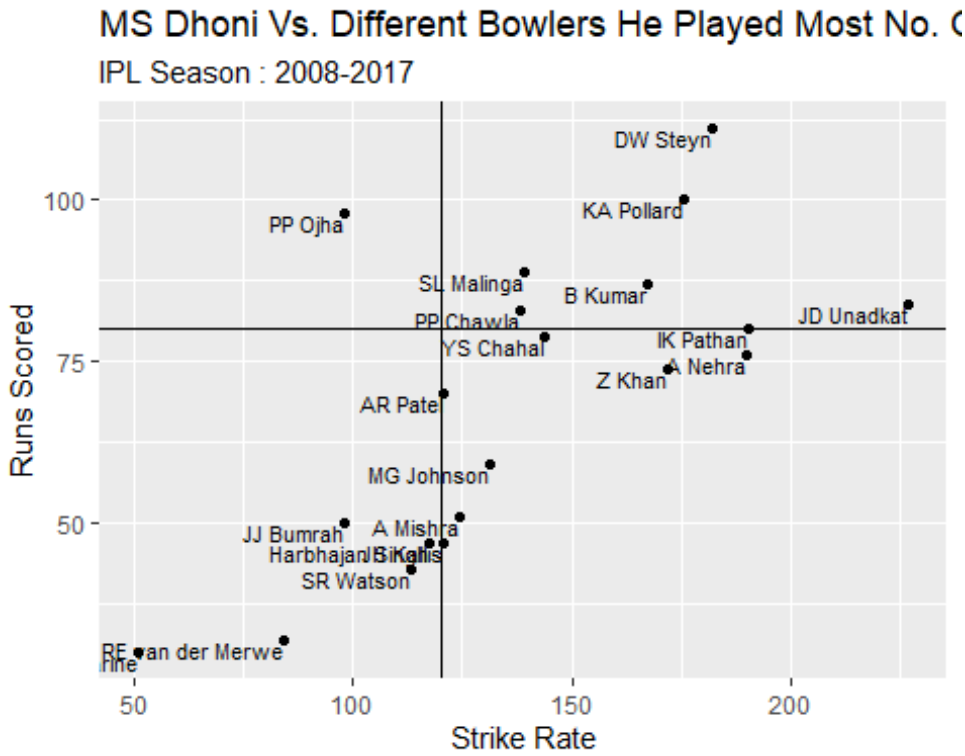


2.ii> Innings wise performance analysis of player.



2.iii> Performance analysis of player against the players he played most number of times.

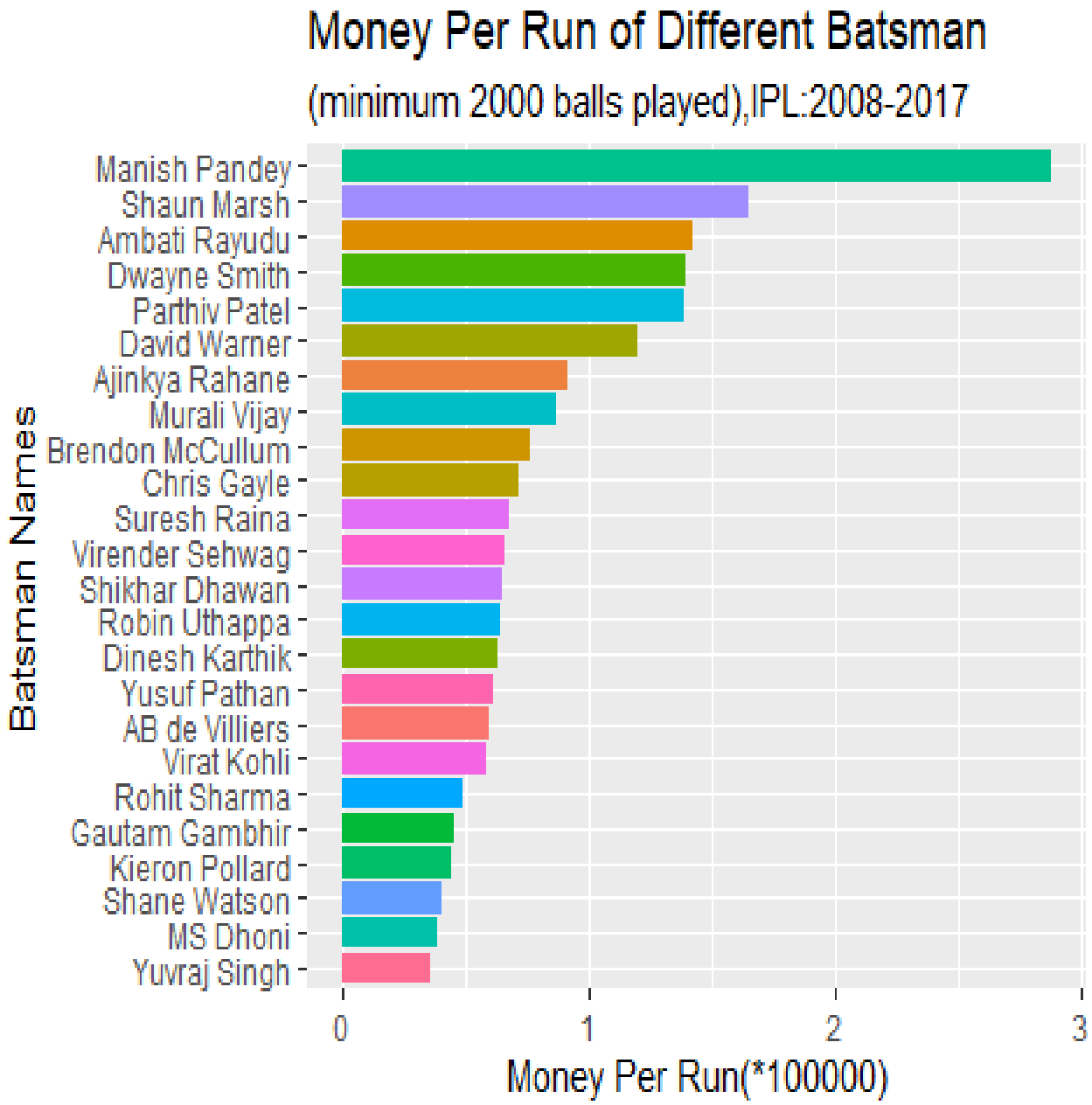




Same strategy can be used to analyze the individual performance of any bowler.

3. Salary wise analysis:

3.i> Which batsman is most profitable for his team ?

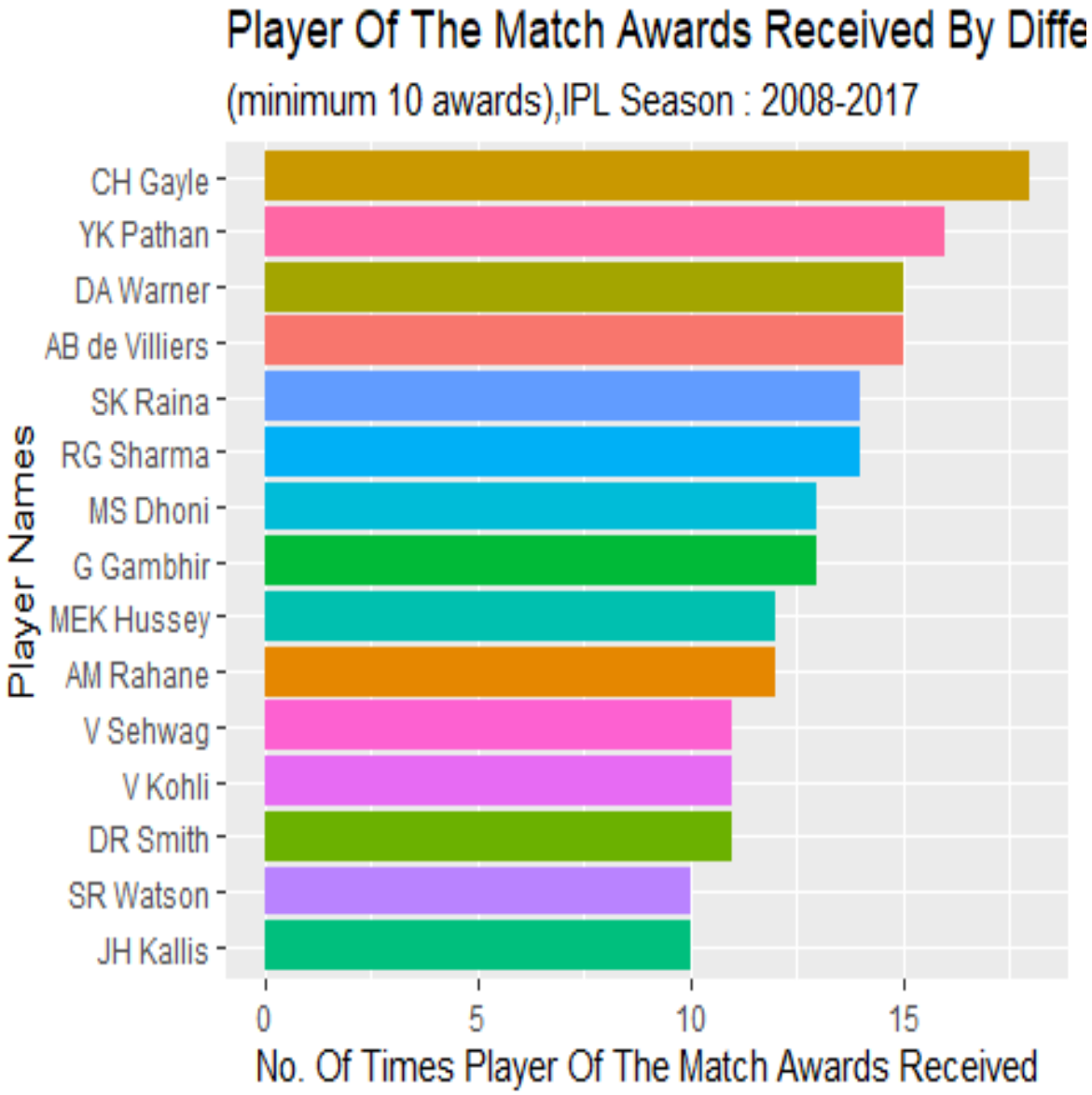


3.ii> Which bowler is most profitable for his team ?

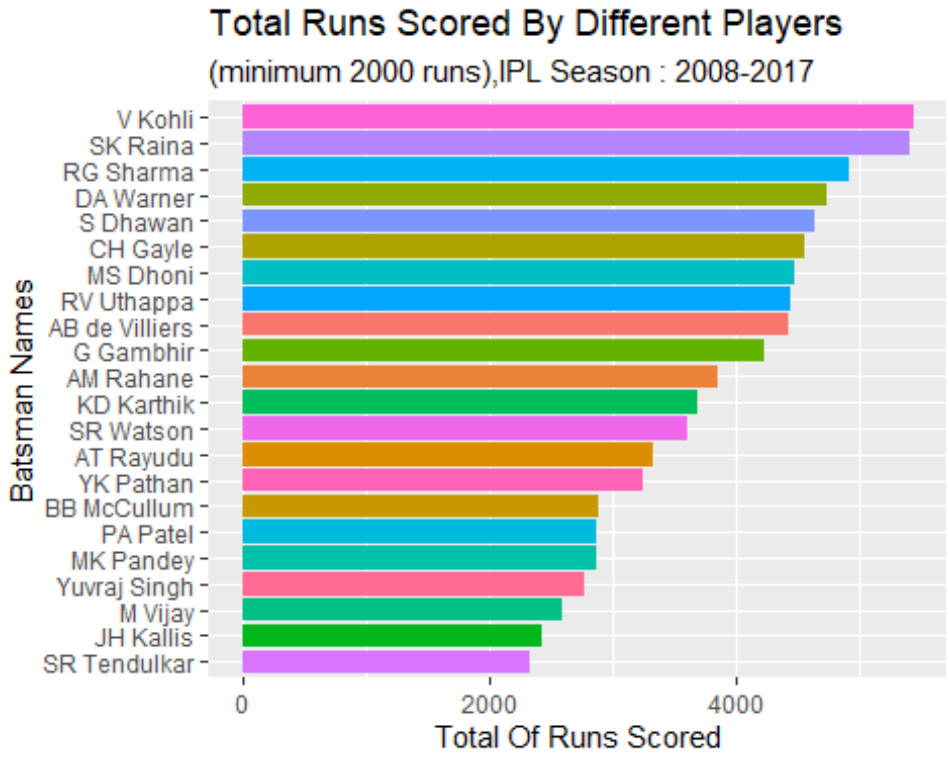
Who are the most profitable bowlers for his team will be represented by similar kind of bar diagram in the project.

4. Star player analysis:

4.i> Which players received player of the match award most number of times?



4.ii> Highest run scorers.



4.iii> Highest wicket takers.

Same strategy can be used to visualize the highest wicket taking bowlers

CONCLUSION:

In this report I have shown the team performances, salary wise performance, who are the star players in IPL and individual player's performance analysis of a player as an example. However in the main project I will analyze performance of every player using R-Shinny web app.