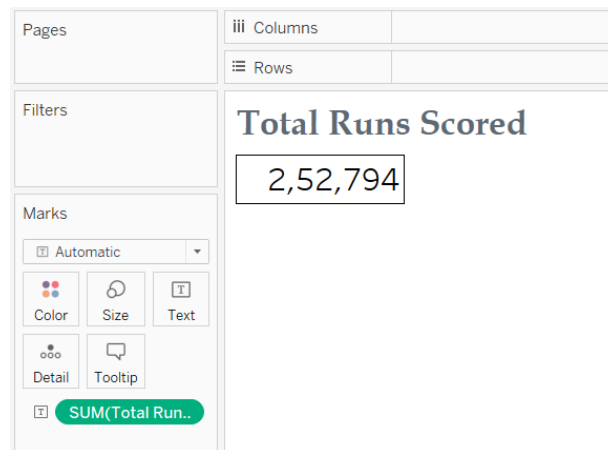


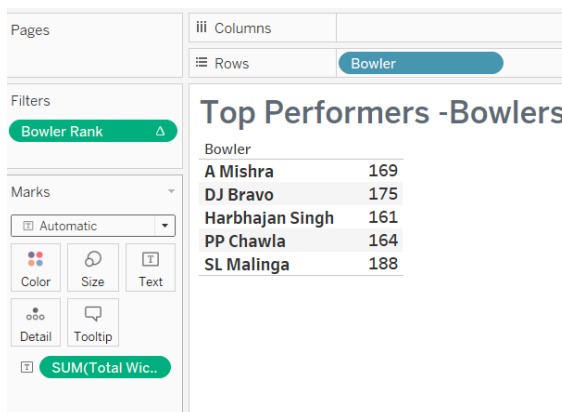
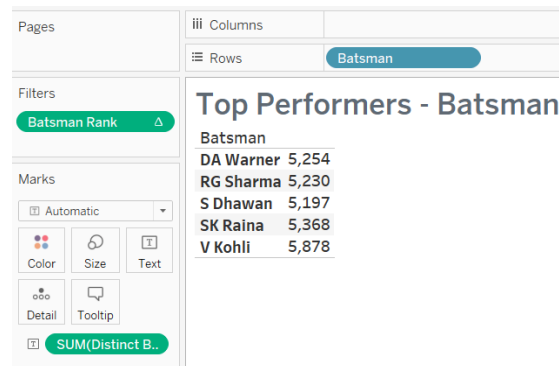
ETE 3 Practical Component - Assignment

KPI'S Requirement:

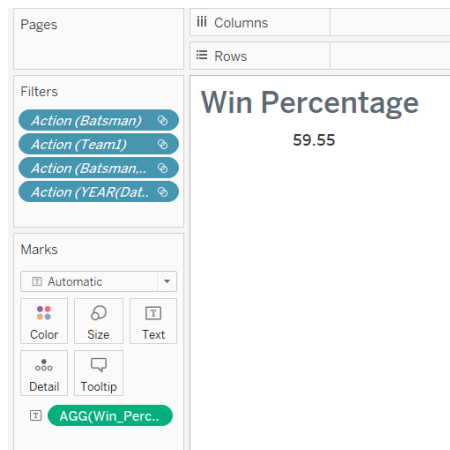
1. Total Runs Scored: Total runs scored across all matches by teams and players.



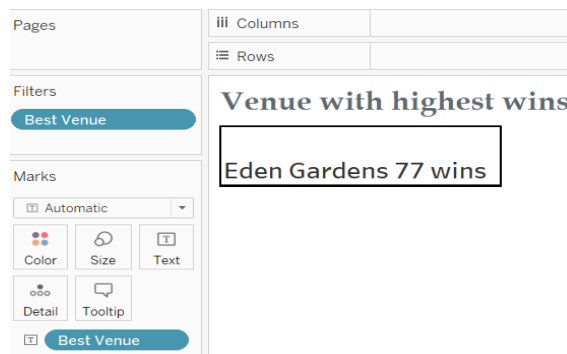
2. Top Performers: Identify the top 5 batsmen and bowlers based on total runs scored and wickets taken, respectively.



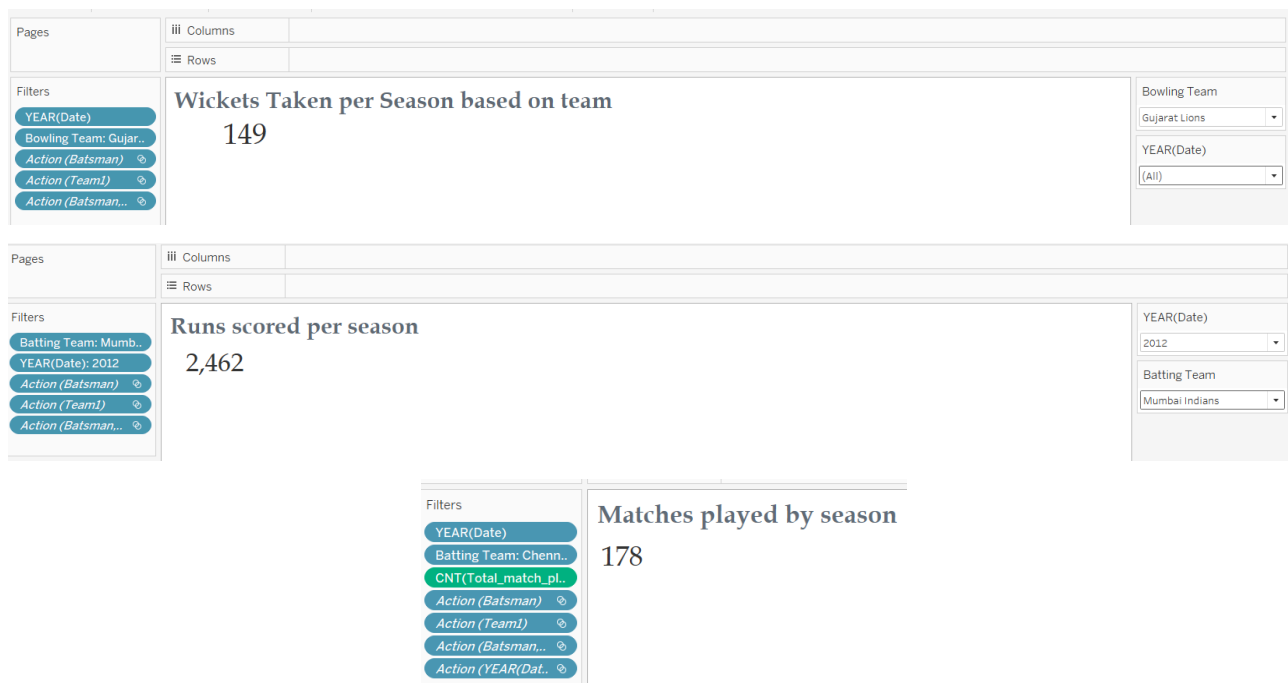
3. Win Percentage: Calculate the win percentage for each team in the dataset.



4. Venue Insights: The stadium/venue where teams perform best (based on wins).

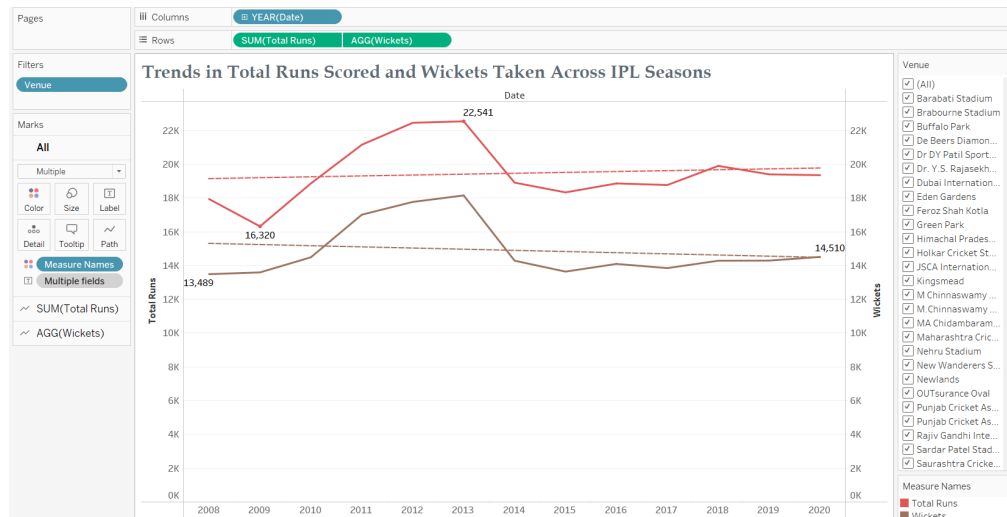


5. Season-Wise Trends: Total matches played, runs scored, and wickets taken per season.

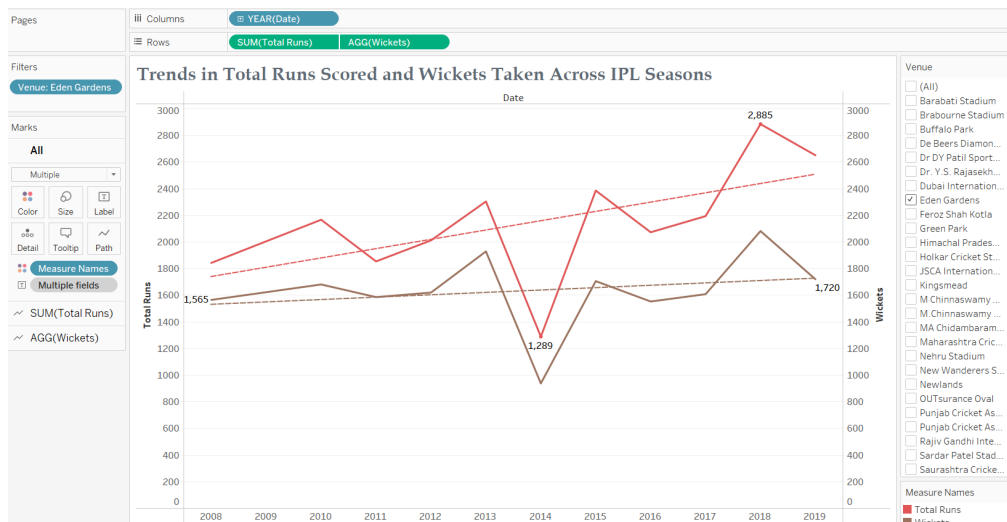


Charts Requirement:

1. Line Chart Show trends in the total runs scored and wickets taken across seasons.

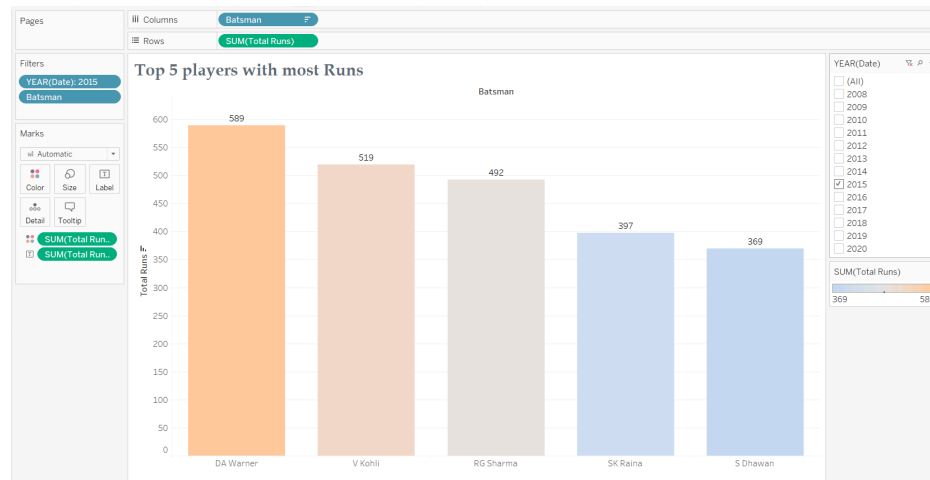


This line chart shows the trends in total runs scored and wickets taken across IPL seasons. The interpretation is largely the same - there is an upward trend in total runs scored indicating increased scoring, while the wickets taken trend is more volatile with ups and downs. This provides further evidence of the IPL becoming more batting-friendly over the years.



This line chart visualizes the trends in total runs scored and wickets taken across IPL seasons. We can interpret that there has been an overall upward trend in total runs scored over the years, with some fluctuations but a general increase in scoring. However, the trend for wickets taken is more variable, with peaks and valleys across the seasons. This suggests the IPL has become a more batting-dominated format over time, with batting performances improving while bowling performance has been more inconsistent.

2. Bar Chart Display the top 5 players with the highest runs or most wickets in a selected season.

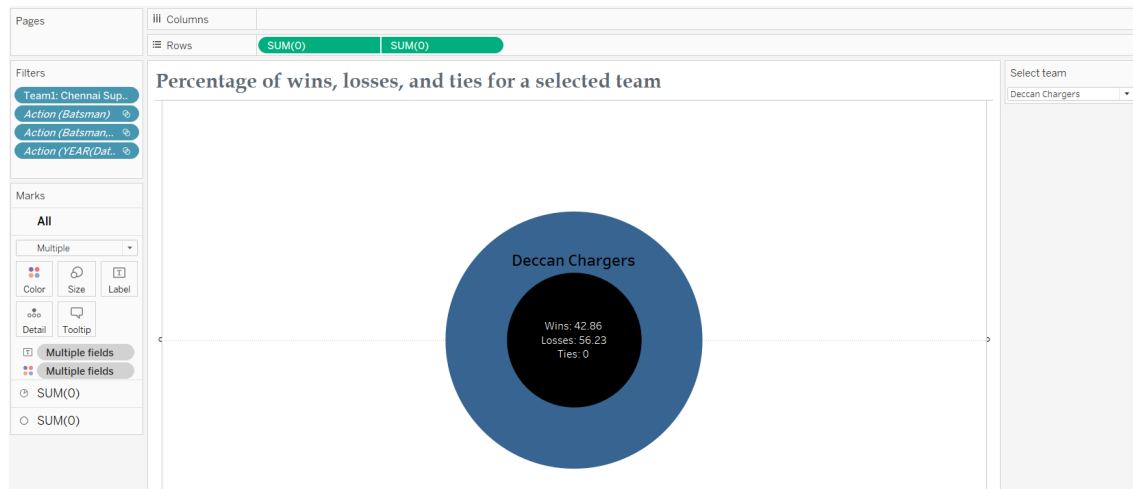


The bar chart in this image shows the top 5 batsmen by total runs scored. We can interpret that DA Warner has been the most prolific run-scorer, amassing 589 total runs. Other top run-scorers include V Kohli, RG Sharma, SK Raina, and S Dhawan. This indicates these are some of the best and most consistent batsmen who have performed well in the IPL.



This bar chart displays the top 5 bowlers by the number of wickets taken. From this, we can interpret that Harbhajan Singh has been the most prolific wicket-taker, taking 385 wickets. The next most successful bowlers are A Mishra, SL Malinga, R Ashwin, and PP Chawla, all taking over 300 wickets. This suggests these are some of the premier bowlers who have dominated bowling in the IPL over time.

3. Donut Chart representing the percentage of wins, losses, and ties for a selected team.

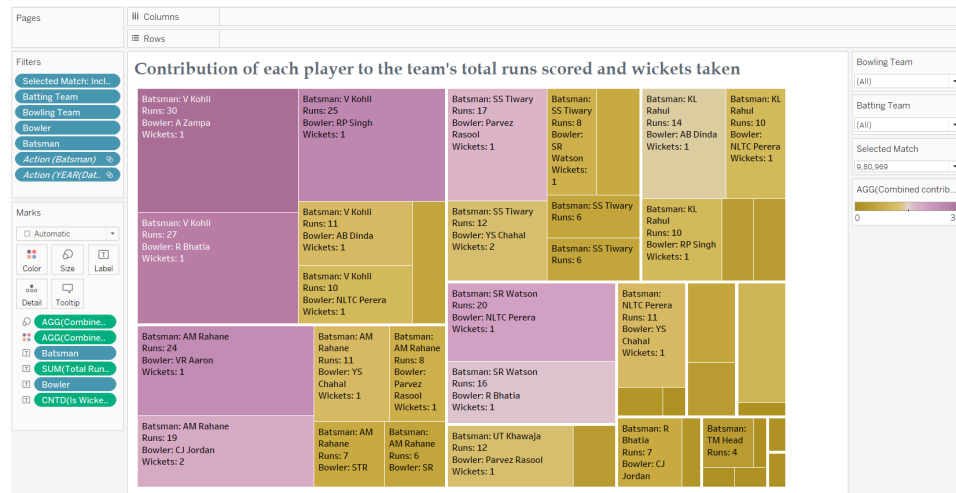


This visualization shows the percentage of wins, losses, and ties for the Deccan Chargers team. We can interpret that the Deccan Chargers have had moderate success, winning just under 43% of their matches, but losing over 56% of their matches. The fact that they have 0% ties indicates they either win or lose outright, with no drawn matches.



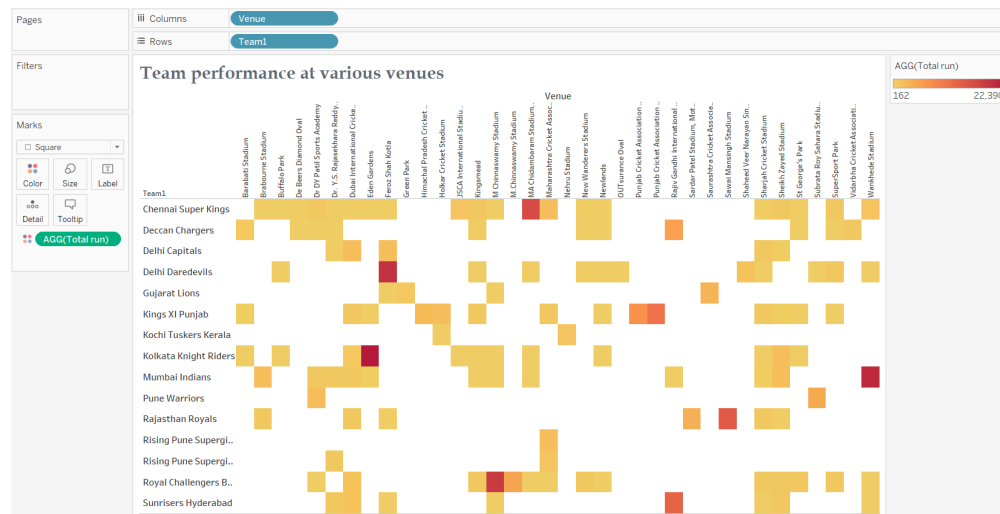
With a win percentage of around 53% and a low tie percentage, the data suggests that the Mumbai Indians are a consistently competitive team, capable of securing more victories than losses. This metric can be used to assess a team's long-term success, consistency, and ability to win close matches, which are all important factors in determining their chances of securing a playoff spot and ultimately, the championship.

4. **Tree Map** Show the contribution of each player to the team's total runs scored and wickets taken in a selected match.



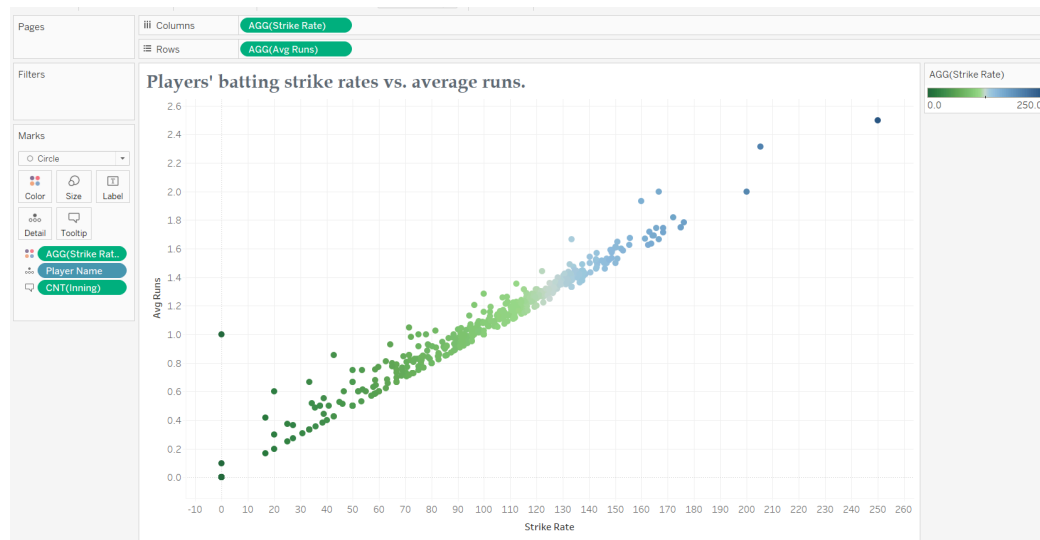
It allows coaches and analysts to identify the key performers, both with the bat and the ball, as well as the supporting cast members who may have played crucial roles in the team's success. By understanding these individual contributions, teams can make more informed decisions around player selection, batting and bowling orders, and game strategies that leverage the strengths of their available resources.

5. **Heatmap** Analyze team performance at various venues (e.g., total runs scored or matches won at different stadiums).



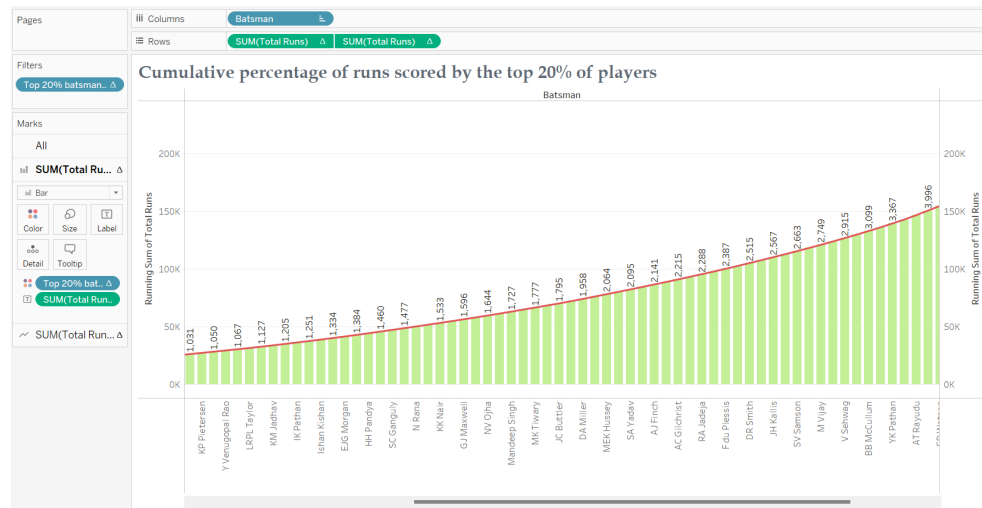
The heatmap visualization provides insights into each team's performance across different stadiums, highlighting their "home ground" advantage or versatility in adapting to various pitch conditions. Teams like Chennai Super Kings and Deccan Chargers show a more consistent pattern of high run-scoring across multiple venues, suggesting they are less affected by pitch conditions.

6. Scatter Plot Compare players' batting strike rates vs. average runs.



Players in the top-right quadrant, with both high strike rates and high average runs, are the most effective batters, capable of scoring runs quickly. The distribution of players across the plot demonstrates the diversity of batting styles, with some players prioritizing strike rate over average runs, and vice versa.

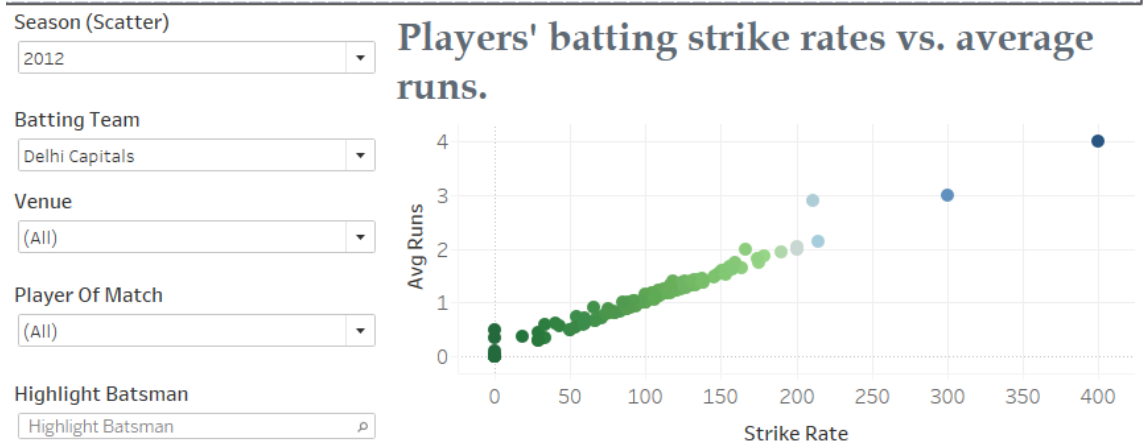
7. Pareto Chart Highlight the cumulative percentage of runs scored by the top 20% of players in the tournament.



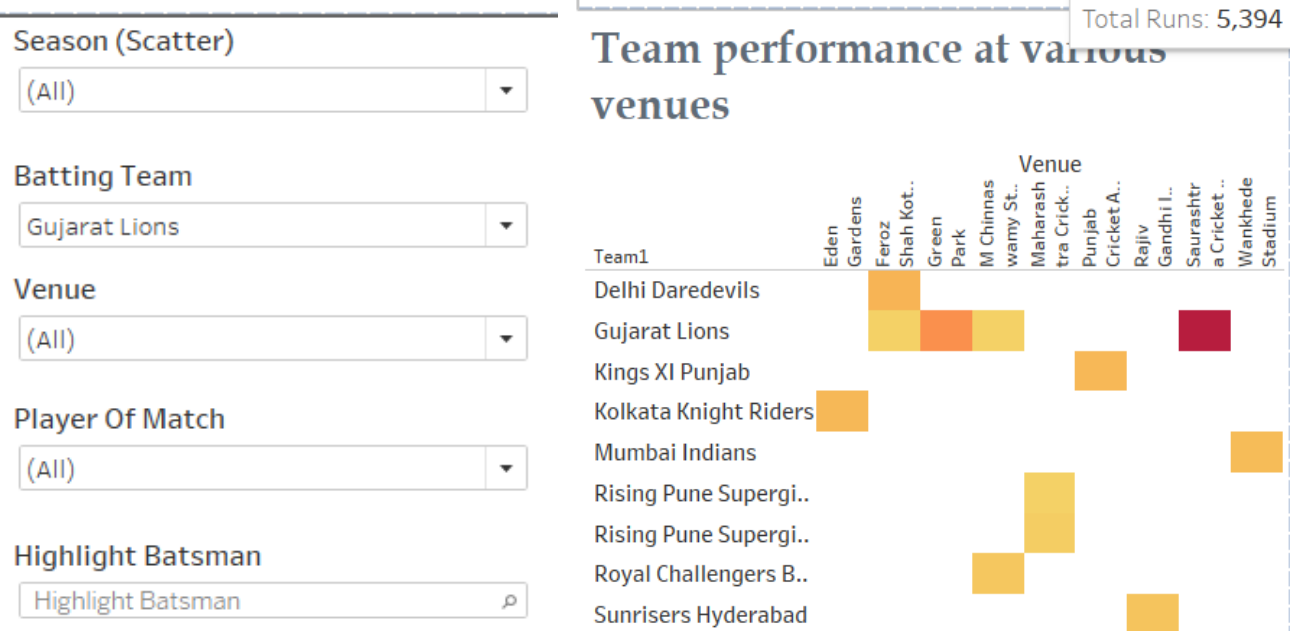
This graph shows the distribution of run-scoring among the top 20% of batters on each team. Teams with steeper curves, like Chennai Super Kings and Deccan Chargers, have a more concentrated run-scoring profile, where the top 20% of batters account for over 90% of the total runs.

Interactivity Requirements:

1. Filters: By Season, Team, Venue, and Player Name.



Filtered by Season - year of 2012 in the above visualisation



Filtered by Team - Gujarat Lions in the above visualisation

Season (Scatter)
(All) ▼

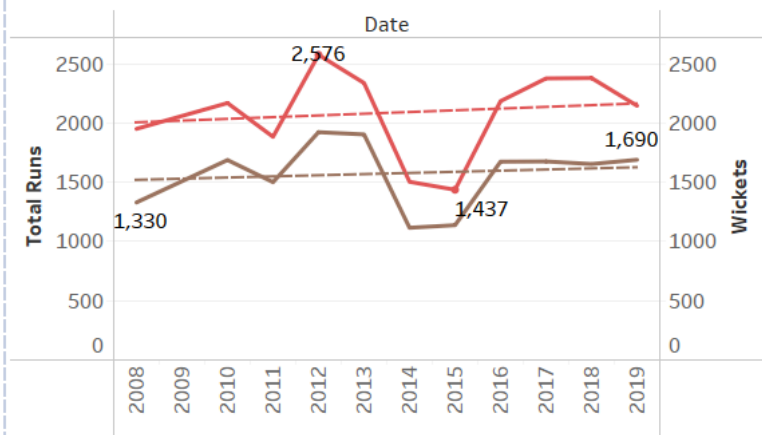
Batting Team
(All) ▼

Venue
Feroz Shah Kotla ▼

Player Of Match
(All) ▼

Highlight Batsman
Highlight Batsman 🔍

Trends in Total Runs Scored and Wickets Taken Across IPL Seasons



Filtered by Venue - Feroz Shah Kotla in above visualisation

Season (Scatter)
(All) ▼

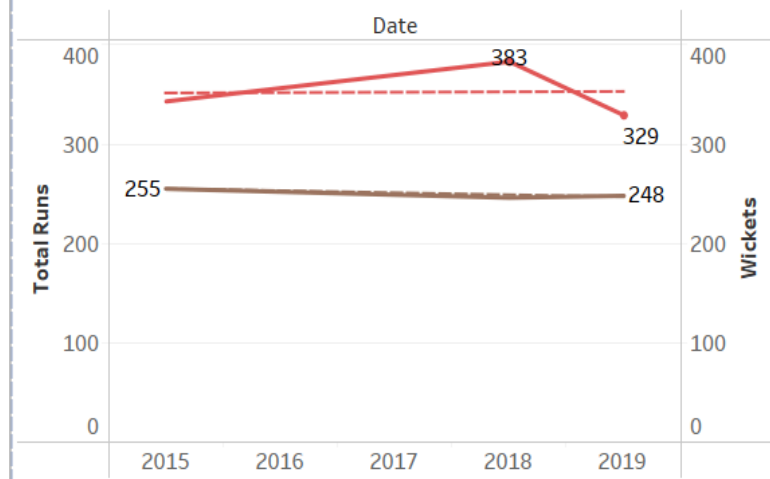
Batting Team
(All) ▼

Venue
Feroz Shah Kotla ▼

Player Of Match
SS Iyer ▼

Highlight Batsman
Highlight Batsman 🔍

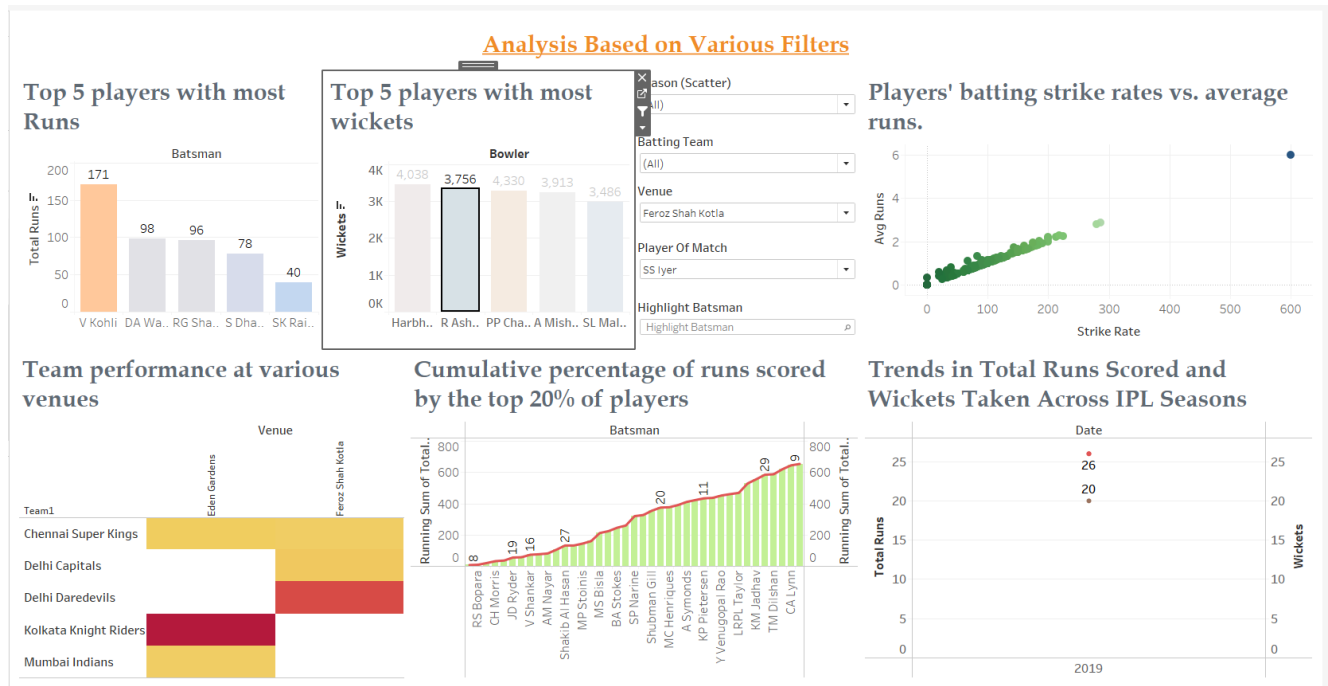
Trends in Total Runs Scored and Wickets Taken Across IPL Seasons



Filtered by Player - SS Iyer in above visualisation

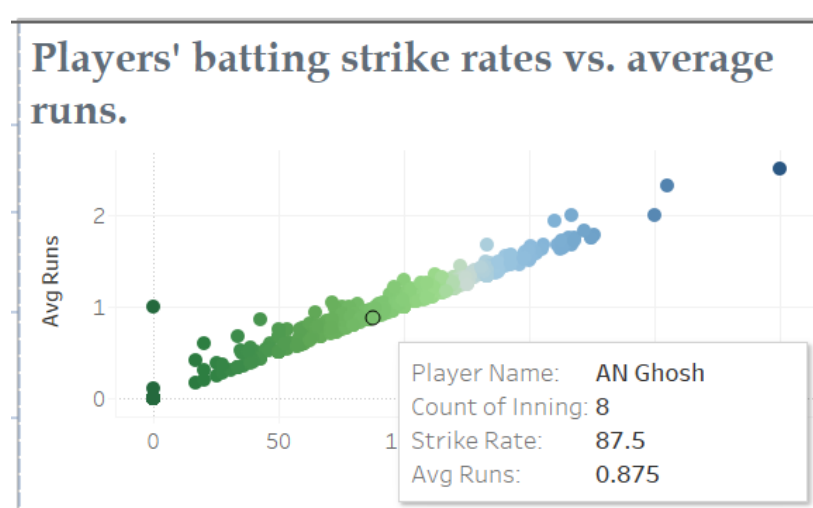
2. Actions:

- Use Filter Action: Clicking on a specific chart (e.g., top players) should filter other visualizations dynamically.



Filtered all visualisations by top player - R Ashwin

- Highlight Action: Highlight specific teams or players on a scatter plot when hovering.



Highlighting the name of player while hovering

- URL Action: Link to player profiles or match summaries on an external IPL statistics website.

Add URL Action

Name

Virat Kohli Profile

Insert

Source Sheets

bar batsman

Run action on

☐ Hover

☐ Select

☒ Menu

URL Target

☐ New Tab if No Web Page Object Exists

☒ New Browser Tab

URL

>it20.com/teams/royal-challengers-bengaluru/squad-details/164

Insert

https://www.iplt20.com/teams/royal-challengers-bengaluru/squad-detai...

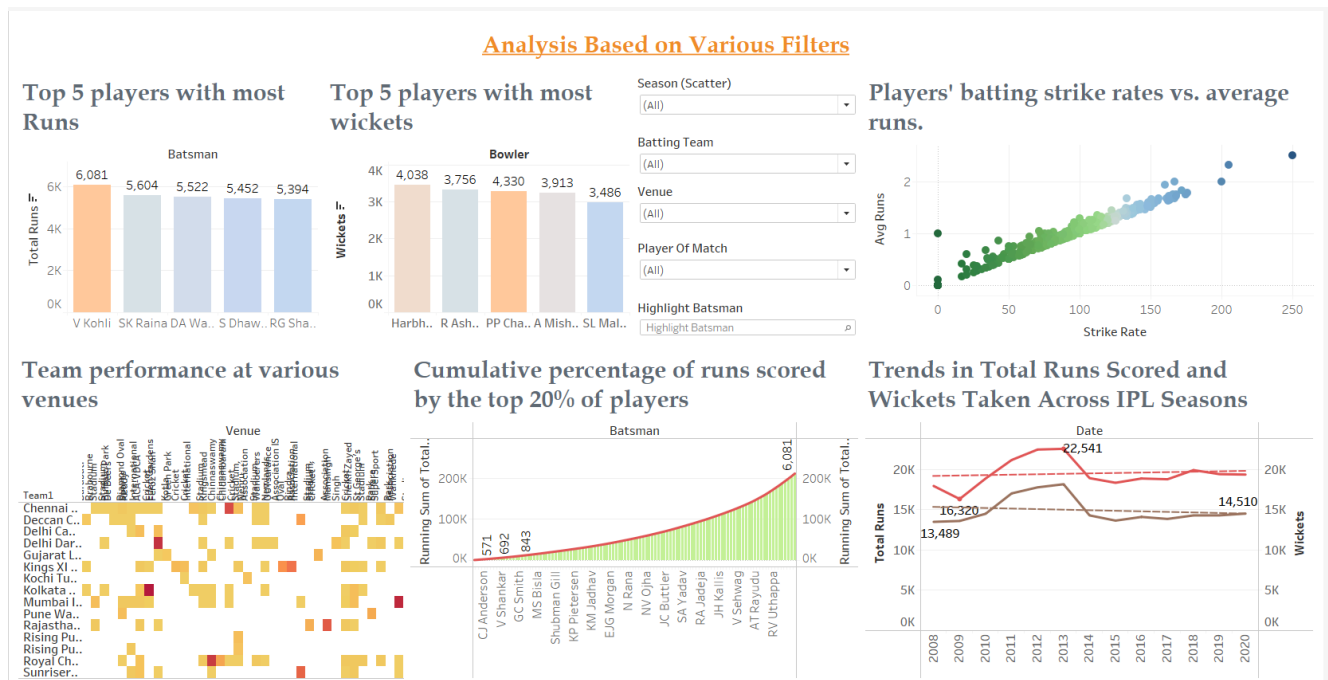
Data Values

Cancel

OK

Creating a URL action on the bar visualization

Final Visualization



Dashboard Analysing IPL Statistics