

# IPL 2024 ANALYSIS PROJECT REPORT

The purpose of this project is to provide an analysis of various aspects of the Indian Premier League (IPL) for 2024, including team and player performance. I first downloaded the IPL 2024 ball-by-ball dataset from Kaggle, containing information about every delivery bowled across all the games in the 2024 IPL. Each row in the dataset represents one delivery bowled. Below are the steps taken and the analysis I conducted.

## 1. Data Preparation

I first dropped the 'match\_id' column as the dataset contained a similar column, 'match\_no', that we could use for analysis. I then replaced team abbreviations with the full form of the team names.

## 2. Analysing the number of deliveries each team faced

Sunrisers Hyderabad faced the most deliveries whereas Gujarat Titans faced the least deliveries in the 2024 IPL.

Excluding wides and no balls, Sunrisers Hyderabad faced 1823 deliveries. Including wides and no balls, Sunrisers Hyderabad faced 1914 deliveries.

Excluding wides and no balls, Gujarat Titans faced 1405 deliveries. Including wides and no balls, Gujarat Titans faced 1471 deliveries.

This is not surprising given that Sunrisers Hyderabad played the most games and that Gujarat Titans played the least games this season.

## 3. Analysing the number of deliveries each team batted per innings

Sunrisers Hyderabad faced the most number of deliveries in the first innings (1188), whereas Punjab Kings faced the least number of deliveries in the first innings (480).

Rajasthan Royals faced the most number of deliveries in the second innings (1147), whereas Kolkata Knight Riders faced the least number of deliveries in the second innings (439).

## 4. Number of deliveries each team bowled

Sunrisers Hyderabad bowled the most number of deliveries whereas Gujarat Titans bowled the least number of deliveries in the 2024 IPL.

Excluding wides and no balls, Sunrisers Hyderabad bowled 1799 deliveries. Including wides and no balls, Sunrisers Hyderabad bowled 1882 deliveries.

Excluding wides and no balls, Gujarat Titans bowled 1310 deliveries. Including wides and no balls, Gujarat Titans bowled 1348 deliveries.

Once again, this is not surprising given that Sunrisers Hyderabad played the most games and that Gujarat Titans played the least games this season.

## **5. Number of matches played by venue**

MA Chidambaram Stadium in Chennai hosted the most games this season with 9 whereas Barsapara Cricket Stadium in Guwahati hosted the least number of games this season with 1.

This is not surprising, as Guwahati was scheduled to host 2 games but one of them got washed out. Meanwhile, Chennai hosted all 7 of Chennai Super Kings' home games as well as 2 playoff matches without any washouts.

## **6. Runs, deliveries, and averages analysis**

Virat Kohli scored the most runs this IPL, scoring 741 runs. This is not surprising that he also faced 496 deliveries, the most amongst any batsman this IPL.

Pat Cummins bowled the most deliveries this IPL, bowling 375 balls. This is not surprising given that his team, Sunrisers Hyderabad, played the most games this season.

Nicholas Pooran had the highest average this IPL, scoring at an impressive average of about 62.375 runs per dismissal.

## **7. Analysis of bowlers' effectiveness at taking wickets**

Harshal Patel took the most wickets this IPL. Including run-outs and obstructing the field, he directly contributed to taking 30 wickets. Excluding run-outs and obstructing the field, he took 24 wickets.

Andre Russell took the most wickets per ball (minimum 50 deliveries bowled) this IPL. On average, he took 0.107 wickets per ball delivered.

## **8. Bowlers' extras analysis**

Gerald Coetzee conceded 38 extras, the most amongst all players this IPL

Mohammed Siraj, Arshdeep Singh, and T Natarajan each bowled 22 extras, the most among all players in this IPL.

Bhuvneshwar Kumar conceded 9 leg byes, the most amongst all players in this IPL

Khaleel Ahmed and Mustafizur conceded 3 leg byes, the most amongst all players in this IPL.

Vaibhav Arora bowled 5 no-balls, the most amongst all players in this IPL.

## **9. Fielding analysis**

KL Rahul took 15 catches, the most amongst all fielders in this IPL.

Harshal Patel contributed to 4 runouts, the most amongst all fielders in this IPL.

KL Rahul contributed to 17 wickets this IPL, the most amongst all fielders in this IPL.

## **10. Team Batting and Strike Rate Analysis**

Sunrisers Hyderabad scored 3047 runs, the most amongst all teams in this IPL. Gujarat Titans scored 2038 runs, the least amongst all teams in this IPL.

Once again, this is not surprising given that Sunrisers Hyderabad played the most games and that Gujarat Titans played the least games this season.

On average, Kolkata Knight Riders scored about 1.78 runs per legitimate ball, the most amongst all teams in this IPL. On average, Gujarat Titans scored about 1.45 runs per legitimate ball, the least amongst all teams this IPL.

Jake Fraser-McGurk had the highest strike rate amongst any batsman this IPL, with an impressive strike rate of about 237.41.

Sunrisers Hyderabad scored 1991 runs batting first, the most amongst all teams in this IPL. Punjab Kings scored 679 runs batting first, the least amongst all teams in this IPL.

Excluding games in which the team batting first did not get to bat the full 20 overs, on average, Kolkata Knight Riders scored 213.75 runs batting first, the most amongst all teams in this IPL.

Excluding games in which the team batting first did not get to bat the full 20 overs, on average, Punjab Kings scored 169.75 runs batting first, the least amongst all teams in this IPL.

Punjab Kings scored 1803 runs batting second, the most amongst all teams in this IPL. Kolkata Knight Riders scored 783 runs batting second, the least amongst all teams in this IPL.

## **11. Economy Analysis**

Pat Cummins conceded 571 runs, the most amongst any bowlers this IPL.

Amongst bowlers who bowled over 50 legitimate deliveries, Jasprit Bumrah conceded about 1.096 runs per ball on average, the least amongst any bowler this IPL.

Amongst bowlers who bowled over 50 legitimate deliveries, Anrich Nortje conceded about 2.25758 runs per ball on average, the least amongst any bowler this IPL.

Gujarat Titans conceded 2100 runs, the least amongst any team this IPL. Sunrisers Hyderabad conceded 3009 runs, the most amongst any team this IPL. This is not surprising given that Sunrisers Hyderabad played the most games and that Gujarat Titans played the least games this season.

On average, Chennai Super Kings conceded about 1.47 runs per legitimate ball, the least amongst all teams in this IPL. On average, Delhi Capitals conceded about 1.678 runs per legitimate ball, the most amongst all teams this IPL.

Kolkata Knight Riders conceded 767 runs bowling first, the least amongst any team this IPL. Whereas, Punjab Kings conceded 1916 runs bowling first, the most amongst any team this IPL.

Punjab Kings conceded 691 runs bowling second, the least amongst any team this IPL. Whereas Sunrisers Hyderabad conceded 1840 runs bowling second, the most amongst any team this IPL.

## **12. Games Won Analysis**

Kolkata Knight Riders won 9 games in the league stage, the most amongst any team this IPL. Whereas, Mumbai Indians won 4 games in the league stage, the least amongst any team this IPL.

In the playoffs, Kolkata Knight Riders won 2 games, Sunrisers Hyderabad won 1 game, and the Rajasthan Royals won 1 game.

Kolkata Knight Riders won 11 games overall, the most amongst any team this IPL. Whereas, Mumbai Indians won 4 games overall, the least amongst any team this IPL.

Kolkata Knight Riders won the 2024 IPL final.