
IPL Data Analysis

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IPL





Indian Premier League is a twenty20 cricket series in India organized by Board of Control for Cricket in India (BCCI).



IPL Teams

- IPL consist of 8 teams when started in 2008
- Three new teams were added in 2011
- Elimination of 1 team in 2012 and another 2 teams in 2013
- Currently 8 teams play in IPL championship

Cricket

Cricket is a game similar to baseball where ball is pitched towards batsman, but pitch is done after taking a long run. Teams try to make runs and outplay opposing team.



Data Description

- ★ Data has been retrieved from kaggle and consists of details of 816 matches from 2008 to 2020.
- ★ The Dataset contains two CSV files i.e Matches 2008-2020.csv and Ball-by-Ball 2008-2020.csv
- ★ It consists of 816 rows and 17 column for matches data file and 193468 rows and 18 columns for ball deliveries file.
- ★ Match file contains venue,location,team1,team2,toss winner,toss decision etc
- ★ ball-by-ball data file contains Match_id,batting team,bowling team,bowler,over,total_runs,inning etc

Tools and Design Principles Used

Tools

- Tableau Desktop 2020.4
- Jupyter lab
- Microsoft Excel

Principle Used

- Gestalt Principle
- Tufte's Principle

Data Cleaning

- ★ Remove Duplicate Data
- ★ Replace Null Values
- ★ Remove unwanted columns

IPL Analysis



- BCCI who host IPL needs analysis to makes informed decisions
- Team owners use this for making decisions like strategy to play,whom to play,etc
- Analysis provides insight to venue details
- Insights for users performance help during game play decision
- Match analysis helps coach to make suggestions to team to change their strategy and moves
- Provide meaningful insights for the team owners and team players for predictions

Venue Analysis



- ★ Cities where majority of matches are hosted
- ★ Most popular stadium based on hosting factor
- ★ Percentage of wins on a stadium based on different types like win by wickets, win by runs or draw
- ★ Provides insight for which stadium is favourable for batting or balling

Batting Analysis

- ★ Analysis of a player's batting skill
- ★ Runs made by a player in each season
- ★ How were runs made i.e. by striking 6s or 4s
- ★ How is strike rate for each user per season

Strike Rate= Runs Scored / 100 balls



Match Analysis

- ★ Leaderboard showing top performer teams
- ★ Average runs made by team per season
- ★ Insight on how teams are performing every year
- ★ Provides input to opposing team on what to expect from opposing team
- ★ Provides details how aggressively teams play to score runs by hitting 6s and 4s



Toss Analysis



- ★ Provides input on how team strategies their first move
- ★ Does team benefit from the Toss winning?
- ★ Decisions to predict team outcome based on Toss decision



References

- ★ <https://indianexpress.com/article/sports/ipl/ipl-2020-full-schedule-fixtures-start-date-timings-venues-6583339/>
- ★ <https://www.iplt20.com/>

Thank you !