Mini Project: IPL - Data Analysis EDA

Problem Statement

You are tasked with conducting a comprehensive analysis of the Indian Premier League (IPL) dataset. The analysis should cover various aspects such as the number of matches played in each season, runs scored, toss-related statistics, team performance, player statistics, and more.

Dataset Information

The Indian Premier League (IPL) a professional Twenty20 cricket league in India usually contested between March and May of every year by eight teams representing eight different cities or states in India. The league was founded by the Board of Control for Cricket in India (BCCI) in 2007. The IPL is the most-attended cricket league in the world and the brand value of the IPL in 2019 was 475 billion (US$6.7 billion)

Dataset Link

The dataset consists of two files:
1. Deliveries Dataset:
https://drive.google.com/file/d/1O6E5DBDSFYSK4D9kandO-ELgFV23GVyi/view?usp=sharing
2. Match Dataset:
https://drive.google.com/file/d/1tfdKTH39s8bhpRbY_Sz5FYO6IRPoFoeG/view?usp=sharing

Guidelines

1. Utilize the provided datasets to extract relevant information.
2. Perform exploratory data analysis to answer the specified questions.
3. Use appropriate visualizations to enhance your findings.
4. Clearly present your analysis and findings.

Data Analysis Questions

1. What was the count of matches played in each season?
2. How many runs were scored in each season?
3. What were the runs scored per match in different seasons?
4. Who has umpired the most?
5. Which team has won the most tosses?
6. What does the team decide after winning the toss?
7. How does the toss decision vary across seasons?
8. Does winning the toss imply winning the game?
9. How many times has the chasing team won the match?
10. Which all teams had won this tournament?
11. Which team has played the most number of matches?

12. Which team has won the most number of times?
13. Which team has the highest winning percentage?
14. Is there any lucky venue for a particular team?
15. Innings wise comparison between teams
16. Which team has scored the most number of 200+ scores?
17. Which team has conceded 200+ scores the most?
18. What was the highest run scored by a team in a single match?
19. Which is the biggest win in terms of run margin?
20. Which batsmen have played the most number of balls?
21. Who are the leading run-scorers of all time?
22. Who has hit the most number of 4's?
23. Who has hit the most number of 6's?
24. Who has the highest strike rate?
25. Who is the leading wicket-taker?
26. Which stadium has hosted the most number of matches?
27. Who has won the most MOM awards?
28. What is the count of fours hit in each season?
29. What is the count of sixes hit in each season?
30. What is the count of runs scored from boundaries in each season?
31. What is the run contribution from boundaries in each season?
32. Which team has scored the most runs in the first 6 overs?
33. Which team has scored the most runs in the last 4 overs?
34. Which team has the best scoring run-rate in the first 6 overs?
35. Which team has the best scoring run-rate in the last 4 overs?

Conclusion

Summarize the key findings from the analysis and highlight any interesting trends or patterns observed in the IPL dataset.