

EXECUTIVE SUMMARY

Cricket is a widely popular and one of the most followed sports across the globe. Club cricket in India is conducted as a tournament in the summers every year as Indian Premier League (IPL). In this exploratory analysis, we decided to explore the existence of Toss Advantage and Home ground Advantage in this popular short format of the sport.

The dataset consists of 3 files namely deliveries.csv, matches.csv and hometeam.csv.

- deliveries.csv consists of ball-by-ball data for each match of the IPL over 12 seasons
- matches.csv has the result of each match with 17 other variables
- hometeam.csv is basically the data of teams and their home grounds.

The aim of this project is to identify trends if any and detect whether there are toss advantages and home ground advantage in the game and identify the affecting parameters.

1. Runs and Wickets trends across the 20 overs in each innings

For Inning 1 and 2 the batting teams have a similar trend up to the death overs but the team that bats first performs better in the death overs (last 4 overs) compared to the team batting second. Both teams follow a similar pattern in losing wickets across overs and they lose a lot of wickets in the death overs.

2. Toss Advantage

The team that wins the toss gets to decide the batting order for the match. When we have a look at the chances of winning the match based on the batting order, we can see that fielding first is a better choice than the batting first for most of the teams. We can observe from the analysis that Toss Advantage does exist in the IPL and only a few teams take advantage of it.

3. Home Advantage

The format of the IPL dictates that each team must play half of its group stages matches at its home ground. Hence, the concept of home advantage becomes a very important part of IPL cricket. We can see from the match winning chances predictor that the team which wins the toss and decides to field first on their home ground have a higher chance of winning than the teams that chose to bat on their home ground. This proves that home advantage exists in the IPL, but again only a few teams can capitalize on the advantage.