

## **Introduction**

### **1.1 Problem statement and research motivation**

The phenomenon of toss in T20 is a flourishing concept that can impact the outcome of the matches, but its impact is not evident. As play can be severely dependent on the pitch conditions, dew conditions, and venue, it constitutes a key question of analysis of whether a choice to attack or defend has any measurable advantage in play, and to the strategy and competitive decency. Due to the fact that the field of cricketing analytics is developing at an unbelievably rapid pace, the role of the influence of pre-match decisions on the performance becomes more timely (Kapadia et al., 2022). The research paper is a study that attempts to determine the correlation between the toss and the IPL victory.

### **1.2 The data set**

The data contains match-level IPL data up to the year 2016, which consists of toss winner, toss decision, match winner, type of outcome, and the win margin. The team mappings and codes of toss decisions are provided in the assorted tables. Only passed matches were included to ensure that comparisons would be made. One can analyse these data in the following questions: are there differences in win proportions based on the decision to be made by the debtor of the toss to bat first or the decision to field first?