IPL Performance Dashboard – Project Report

1. Project Overview

This project analyzes **IPL (Indian Premier League) match data from 2008–2017** using **Power BI**.
The goal is to uncover season trends, player performance insights, and match-winning patterns.

2. Tools Used

- **Power BI Desktop**

- **DAX Functions**

- **Data Transformation (Power Query)**

- **Visual Analytics**

3. Dataset Description

Dataset includes:

- Match details (season, teams, venue, toss decision, result)

- Ball-by-ball level information (batsman runs, bowler wickets, extras)

- Player performance metrics

Total rows:

- Deliveries table: ~150k rows

- Matches table: 636 matches

4. Objectives

✔ Create a dynamic IPL dashboard
✔ Analyze season trends (runs, fours, sixes)
✔ Identify top batsmen and bowlers
✔ Study toss influence on match outcomes
✔ Analyze venue-wise match distribution

Dashboard Structure

Page 1 – Season Trends Dashboard

KPIs:

- **Total Matches Played**

- **Total Runs Scored**

- **Total Sixes Hit**

- **Total Fours Hit**

Visuals:

- **Matches Played Per Season (Bar Chart)**
  Shows match volume trend.

- **Total Runs Per Season (Line Chart)**
  Shows scoring patterns over seasons.

Filters:

- Team Selector

- Season Range Slider

Page 2 – Player Analysis

Top Batsmen by Total Runs

Bar chart ranking top 10 batsmen.

Top Bowlers by Total Wickets

Bar chart ranking top bowlers.

All visuals react dynamically to season range & team selection.

Impact of Toss Winner on Match Winner

Shows how often each team wins after winning the toss.

Toss Decision Distribution

Pie Chart showing ratio of *bat first* vs *field first*.

Most Matches Hosted by Venue

Horizontal bar showing top stadiums hosting IPL matches.

Key Insights

Season Insights

- 2012–2013 seasons had highest total runs.

- Matches remained consistent every year.

◆ **Player Insights**

- **Suresh Raina** is the leading run scorer.

- **Lasith Malinga** is the top wicket taker.

◆ **Match Insights**

- Most teams **win more often after winning the toss**.

- **Feroz Shah Kotla Stadium** hosted the highest number of matches.

Steps Performed in Power BI

- **Imported CSV datasets**

- **Cleaned nulls, removed unnecessary columns**

- **Created measures:**

  - **Total Runs**

  - **Total Fours**

  - **Total Sixes**

  - **Total Wickets**

  - **Count of Matches**

- **Built slicers and interactive visuals**

- **Applied IPL theme color palette (Blue White)**

- **Used small multiples for team comparison**

Final Outcome

A fully interactive IPL dashboard that allows users to:

- Explore seasonal performance

- Compare player stats

- Understand match behaviour

- Get insights for decision-making