SYNOPSIS

Project: IPL Match Performance Data Analytics and Reporting using Excel

TEAM MEMBERS:

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1. OBJECTIVE:

To perform data analytics on IPL match data to understand team and player performance, identify trends across seasons, and visualize key insights using Microsoft Excel tools such as pivot tables, charts, and dashboards.

2. INTRODUCTION:

Cricket is one of the most data-driven sports, where every run, ball, and wicket contributes to understanding performance. Analyzing IPL (Indian Premier League) data enables discovering hidden trends in player and team statistics. This project focuses on exploring IPL match data using Microsoft Excel to generate insights on batting, bowling, and team efficiency. It uses pivot tables, charts, and Excel functions to visualize player consistency, team strengths, and season trends.

3. PROBLEM STATEMENT:

The large volume of IPL data makes it challenging to manually identify performance patterns. Team management, analysts, and fans require a structured approach to evaluate player performance and season-based comparisons. This project aims to simplify complex IPL datasets into meaningful visual insights using Excel's analytical features.

4. OBJECTIVES:

- To analyze IPL match data and identify top-performing teams and players.
- To visualize match statistics using pivot tables and Excel charts.
- To calculate averages, totals, and performance metrics using Excel formulas.
- To create an interactive Excel dashboard for easy data interpretation.
- To demonstrate how Excel supports sports data reporting and trend analysis.

5. DATASET DETAILS:

Source: Generated IPL dataset (based on 2018–2023 seasons) Records: 1,200 deliveries Columns: Match_ID, Season, Team_Batting, Team_Bowling, Batsman, Bowler, Over, Ball, Runs_Off_Bat, Extras, Total_Runs, Wicket_Type

6. TOOLS AND TECHNOLOGIES:

Tool	Purpose
Microsoft Excel	Data cleaning, pivot tables, and chart visualization
Excel Functions (SUMIF, COUNTIF, AVERAGEIF)	Statistical and conditional calculations
Excel Dashboards	Interactive reporting and analysis

7. METHODOLOGY:

• Data Collection: Load IPL dataset in Excel for analysis.

• Data Cleaning: Remove duplicates, handle missing values, and format data.

• Exploratory Data Analysis: Analyze runs, wickets, and team performances.

• Visualization: Create pivot tables, charts, and conditional formatting views.

• Dashboard Creation: Combine visuals into an interactive Excel dashboard.

• Insight Generation: Derive team and player performance insights.

8. EXPECTED OUTCOMES:

• Visualization of team and player performance trends.

• Identification of top-performing batsmen and bowlers.

• Season-wise comparison of total runs and wickets.

• Demonstration of Excel as a complete data analytics tool.

• Interactive dashboard summarizing key insights.

9. CONCLUSION:

This project demonstrates how Excel can be effectively used for sports data analytics and reporting. By analyzing IPL data, valuable insights into match performance, player consistency, and team strategies are obtained. The use of Excel charts, formulas, and dashboards provides an efficient way to present data-driven insights in a clear and interactive format.

10. REFERENCES:

• IPL Official Website: https://www.iplt20.com/

• Microsoft Excel Documentation: https://support.microsoft.com/excel

• Data Analytics Concepts: https://www.datacamp.com/