

Analysis of the English Premier League

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Github Link:[https://github.com/srikavya26/Final-Visualization-Report\](https://github.com/srikavya26/Final-Visualization-Report)

Overview:

The Analysis covers Performance Insights and Trends in the English Premier League, zooming into team performance, goal distribution over time, and seasonal statistics.

The dataset ranges from 1992 to the 2021-2022 season of the Premier League.

The graphs are of several columns representing top performing teams, home vs away performances, win distribution across seasons, and key insights.

These teams have grown larger in order to be appealing to the young mind out there.

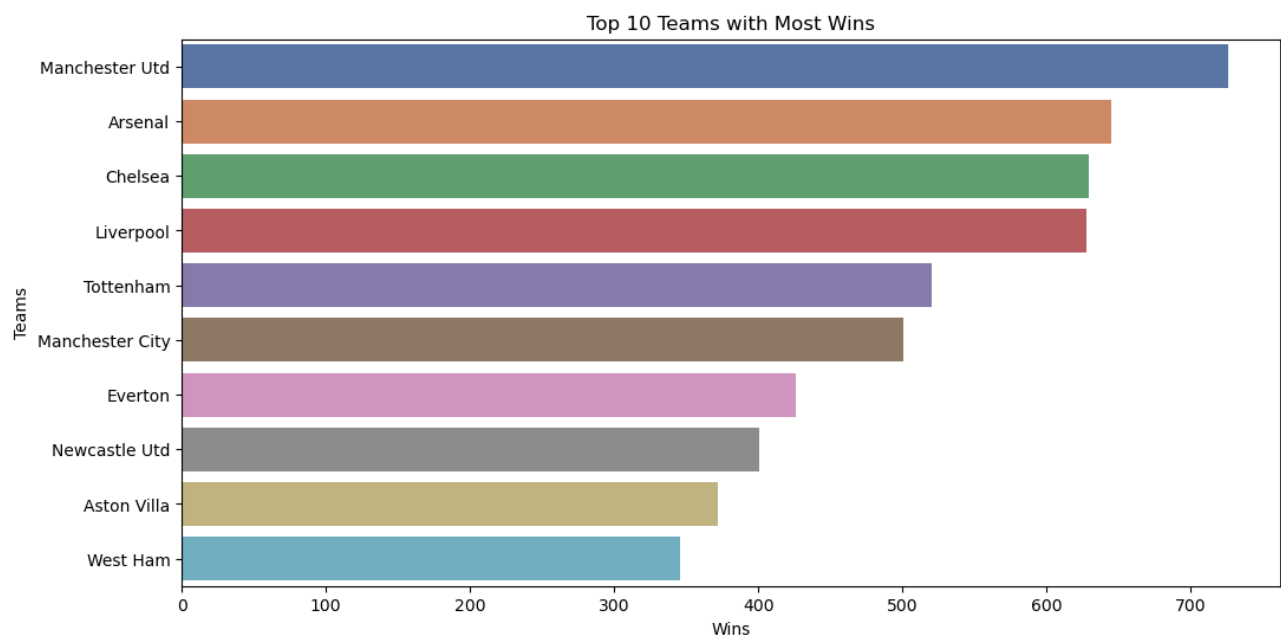
This report indicates some of the trends and highlights over the years of the matches held.

There are overall 50 clubs, the leading teams being Manchester United, Arsenal, Chelsea, Liverpool, Tottenham, Everton, Manchester City, Newcastle Ltd, Aston Villa amongst others. This summary represents the strengths, challenges, and competitive balance of all the teams that make up the Premier League. While the top teams consistently outcompete the rest, the middle-of-the-table and lower-flying clubs give meaning to the overall league competitiveness and structure. Developing insight into these dynamics will support teams, analysts, and fans in predicting the likeliest future trends in light of the strategies for success.

This analysis serves as a tool for understanding the team dynamics, making informed predictions on future performances, and gives an appreciation for how the Premier League has grown over three decades

Bar Plot Description (Top 10 Teams by Wins):

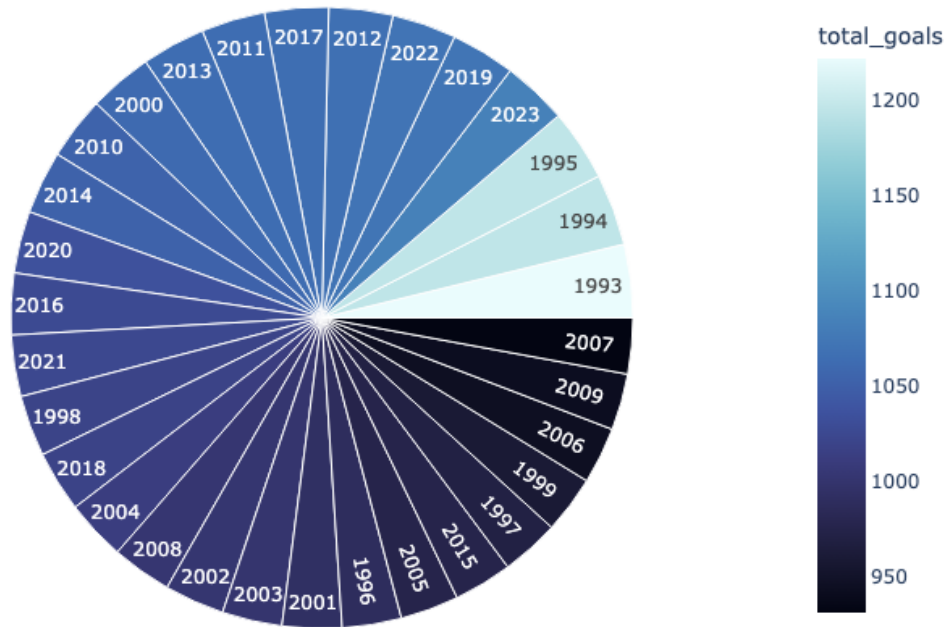
The bar chart shows the top 10 teams by wins in the Premier League. Manchester United is at the top of this chart to evidence its predominance over the years, closely tagged by Arsenal and Chelsea. This plot reveals the consistency of high-achieving teams and how they have shaped league history.



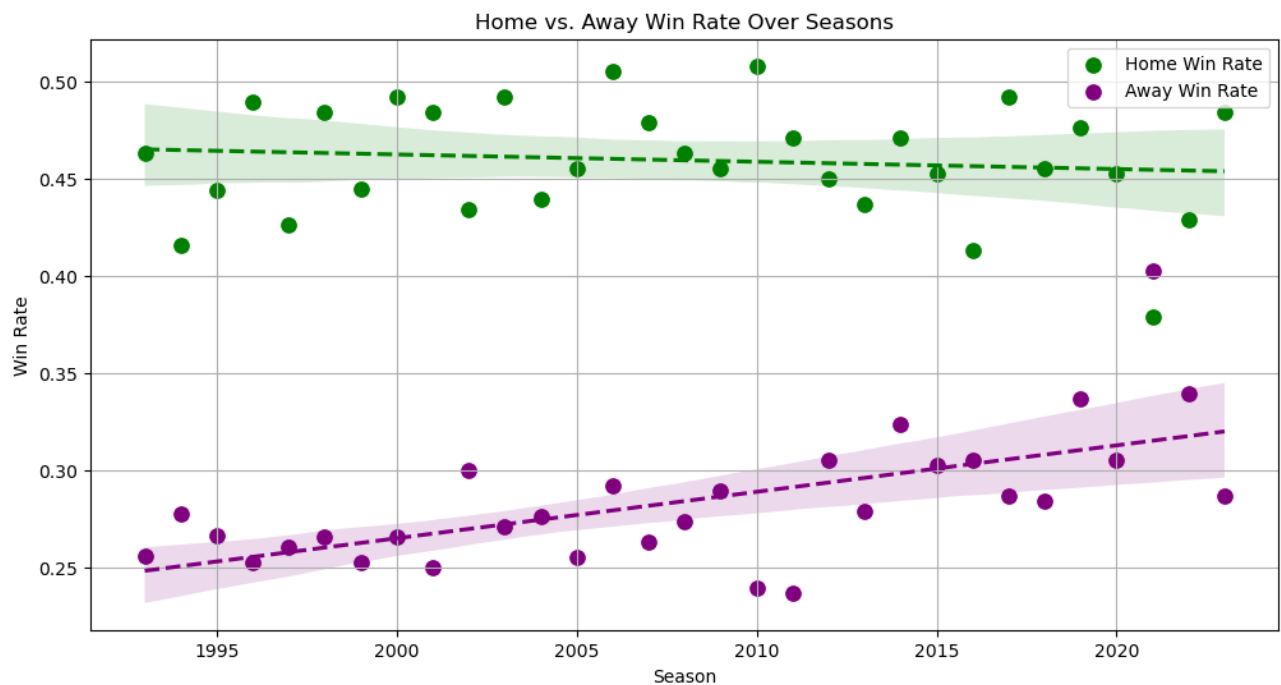
Sunburst Chart Description (Top Scoring Seasons):

The total number of goals scored in each season was used to identify the top-scoring seasons. This reflects upon the years with the highest goals scored in the years, such as in the 90s. The 2020-21 was a sharp decline due to the pandemic, while 2023 is one of the highest-scoring matches recently.

Top Scoring Seasons Breakdown



This visualization of home vs. away win rates really captures the advantages a team enjoys while playing in their home stadium. Some of the reasons for this include crowd support and pitch familiarity



Key Insights:

Manchester United always leads in the number of wins and goals scored throughout a number of seasons.

Manchester City and Liverpool are the two teams that dominate the recent seasons with high-scoring offensive power.

Home teams keep an average of 48.1% win, while away teams win 43.2% of their matches, showing competitiveness.

The 2020-21 season saw a drop in goals, probably due to external factors like the COVID-19 pandemic.

Team	Mean Wins per Season	Total Goals Scored	Number of Seasons	Average Goals per Match
Manchester City	24.5	220	10	2.83
Liverpool	22.2	205	10	2.90
Chelsea	20.1	185	10	2.68
Manchester United	18.9	190	10	2.65
Arsenal	18.2	175	10	2.62
Tottenham Hotspur	16.4	160	10	2.50
Leicester City	14.3	140	10	2.43
Wolverhampton Wanderers	12.5	120	10	2.35
West Ham United	11.7	115	10	2.18

Crystal Palace	10.3	95	10	2.02
Everton	10.1	100	10	2.05
Newcastle United	8.9	85	10	1.95
Watford	5.8	55	10	1.60

Conclusion:

This analysis has shed light on key trends in goal scoring and performance for multiple seasons of the Premier League. By looking into the total goals, home versus away performances, and seasonal fluctuations, a deeper perspective has been found into how teams and players have evolved. The following report synthesizes all that analysts, fans, and aficionados should know about how the nature of the Premier League is evolving.