

Premier League (2023 / 2024) EDA

[01] Project Overview

The English Premier League (EPL) 2023/2024 Data Analysis Project Involves A Comprehensive Exploratory Analysis Of The Season's Football Matches, Player Performances, And Team Statistics. The Dataset Provides Detailed Information About Match Outcomes, Individual Player Statistics, Team Performance, And Other Key Metrics That Can Reveal Insights Into The Season's Trends, Standout Performers, And Team Dynamics.

[02] Data Description

- Data Link ⇒ /kaggle/input/premier-league-all-players-stats-2324/premier-player-23-24.csv
- About Data ⇒ This Dataset Includes All Players Statistics And Important Columns Such As Player, Age, Nation, Pos, Gls, Ast, G+A, G-PK, PK, CrdY, CrdR, xG

[03] Tools Used

- Python (Libraries Such As ⇒ Pandas , Matplotlib , Seaborn)
- SQL

Power BI

Key Insights

- All Teams Score 1197 Goals
- All Teams Have 859 Assists
- Top Scorer Is Erling Haaland ⇒ (27 Goal)
- Top Assister Is Anthony Gordon ⇒ (15 Assist)
- Most Team Has Yellow Cards Is Chelsea ⇒ (108 YC), And Least Team Is Man City ⇒ (53 YC)
- Most Team Has Red Cards Is Burnley ⇒ (7 RC), And Least Team Is Luton Town ⇒ (0 RC)
- Most Team Scores From PK Is Chelsea ⇒ (11 Goals)
- Most Player Scores From PK Is Cole Palmer ⇒ (9 Goals)
- Most Team Have Goals Is Man City ⇒ (94 Goals)
- Most Team Have Goals Without PK Is Man City ⇒ (85 Goals)
- Most Player Have Goals Without PK Is Erling Haaland ⇒ (20 Goals)
- Most Age Group Contribute Is (Between 20-30) ⇒ (1021 Goals , 726 Assists)
- Most Player Has Goals In Age Group (Under 20) Is Garnacho ⇒ (7 Goals)
- Most Team Has Goals In Age Group (Under 20) Is Brighton ⇒ (12 Goals)
- Most Player Has Goals In Age Group (Above 30) Is Mohammed Salah ⇒
 (18 Goals)
- Most Team Has Goals In Age Group (Above 30) Is Liverpool ⇒ (20 Goals)
- Most Player Has Goals Without PK In Age Group (Above 30) Is Son Heung-min ⇒ (15 Goals)
- Performance Of Foreign Players ⇒ (828 Goals, 590 Assists)
- Top Defender Has Goals Is Cristian Romero ⇒ (5 Goals)
- Top Team Its Defenders Have Goals Is Tottenham Hotspur ⇒ (15 Goals)

- Total XG = 1204 , Total Expected Assists = 866 , Total PK = 107 , Total
 Goals From PK = 96
- Top Team Has XG Is Liverpool ⇒ (90.30)
- Top Team Waste Chances Is Everton ⇒ XG Greater Than Goals By (16.20)
- Top Team Exploited Chances Is Man City ⇒ Goals Greater Than XG By (12)
- Top Player Has Progressive Carries Is Jeremy Doku ⇒ (218 Times)
- Top Defender Has Progressive Carries Is Antonee Robinson ⇒ (99 Times)
- Top Midfielder Has Progressive Carries Is Martin Ødegaard ⇒ (91 Times)
- Top Player In Age Group (Under 20) Has Progressive Carries Is Garnacho
 ⇒ (178 Times)
- Top Player In Age Group (Above 30) Has Progressive Carries Is Son Heung-min ⇒ (119 Times)
- Top Player Has Progressive Passes Is Rodri ⇒ (376 Passes)
- Top Defender Has Progressive Passes Is Zinchinko ⇒ (229 Passes)
- Top Player In Age Group (Under 20) Has Progressive Passes Is Adam
 Wharton ⇒ (79 Passes)
- Top Player In Age Group (Above 30) Has Progressive Passes Is Pascal Groß ⇒ (302 Passes)
- Total Foreign Players Is 381 Players
- Top Country Have Players (Excluding ENG) Is Brazil ⇒ (33 Players)
- Top Country Have Players In Age Group (Under 20) (Excluding ENG) Is IRL
 ⇒ (5 Players)
- Top Team Have Foreign Players In Age Group (Under 20) Is Brighton ⇒ (6
 Players)
- Top Country Have Players In Age Group (Between 20-30) (Excluding ENG) Is France
 - ⇒ (25 Players)
- Top Team Have Foreign Players In Age Group (Between 20-30) Is Burnley
 ⇒ (21 Players)

- Top Country Have Players In Age Group (Above 30) (Excluding ENG) Is Brazil ⇒ (6 Players)
- Top Team Have Foreign Players In Age Group (Above 30) Is Fulham ⇒ (5 Players)
- Top Country Have Contributions (Excluding ENG) Is Brazil ⇒ (97 Goals, 65 Assists)

Recommendations

- Cole Palmer Scored 9 Goals From 9 Penalties His Accuracy Is 100%, So I Suggest He Be England's First Penalty Taker.
- The Age Group (Between 20-30) Is The Most Productive, So I Suggest That If A Team Prefers To Sign A Player From This Age Group, It Should Do So.
- Garnacho Is The Best Player In Age Group (Under 20), So I Suggest That Teams Focus On This Player
- Mohammed Salah And Son Heung-min The Best Players In Age Group (Above 30), So I Suggest They Be The First Two Choices When Looking At A Player In This Age Group
- Cristian Romero Was The Best Scoring Defender (Most His Goals From Headers), So I Suggest If A Team Relies On Set Pieces He Would Be A Good Choice
- Everton And Liverpool Were The Teams That Wasted The Most Chances,
 So I Suggest To These Teams To Sign Players In Attacking Line To
 Improve The Quality Of Finishing
- Man City Was Most Exploitative Of The Chances, So I Suggest That They
 Maintain The Attacking Line, Especially Erling Haaland
- Antonee Robinson Was The Most Defender (Full-Back) Had Progressive Carries, So I Suggest That He Is A Good Choice For Attacking Teams
- Zinchinko Is A Good Choice For Attacking Teams Because He The Most Defender (Full Back)

Progressive Passes

- Virgil Van Dijk Was The Most Defender (Center Back) Had Progressive Passes, So I Suggest That He Is A Good Choice For Teams That Relies On Build-Up From Back
- Brazil And France Are Two Good Choices If A Team Prefer To Sign With A Foreign Player