

# FINDING UNDERVALUED TALENT FOR COST-EFFECTIVE TEAMS

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## Introduction

- Sports analytics can be referred to as a scientific field that deals with the collection and analysis of past and current sports data.
- This collection combines and applies methods that can give an added benefit to a player or team.
- This analysis can give qualitative analysis to players, owners, sporting directors and team to help them predict future situations or make suitable decisions.
- Moneyball is the building of a competitive team using limited budget, with the help of sports analytics.

## Objective

- Identify the best predictors of a team's success in football.
- How a top football club can identify the best talent and the best team players on each team.

## Methodology

- Players and team performance were obtained from Fbref.com, www.kaggle.com, whoScored.com and some sports analytic articles.
- Data collected were based on leagues in Europe.
- Data collected were goals and assists on team level. And goals, assists, salary and transfer fee on player level.
- Data collected was verified against official league websites
- Undervalued and overvalued players were classified based on their attacking output relative to their salary and transfer cost.
- Python was used for data processing.

## Charts

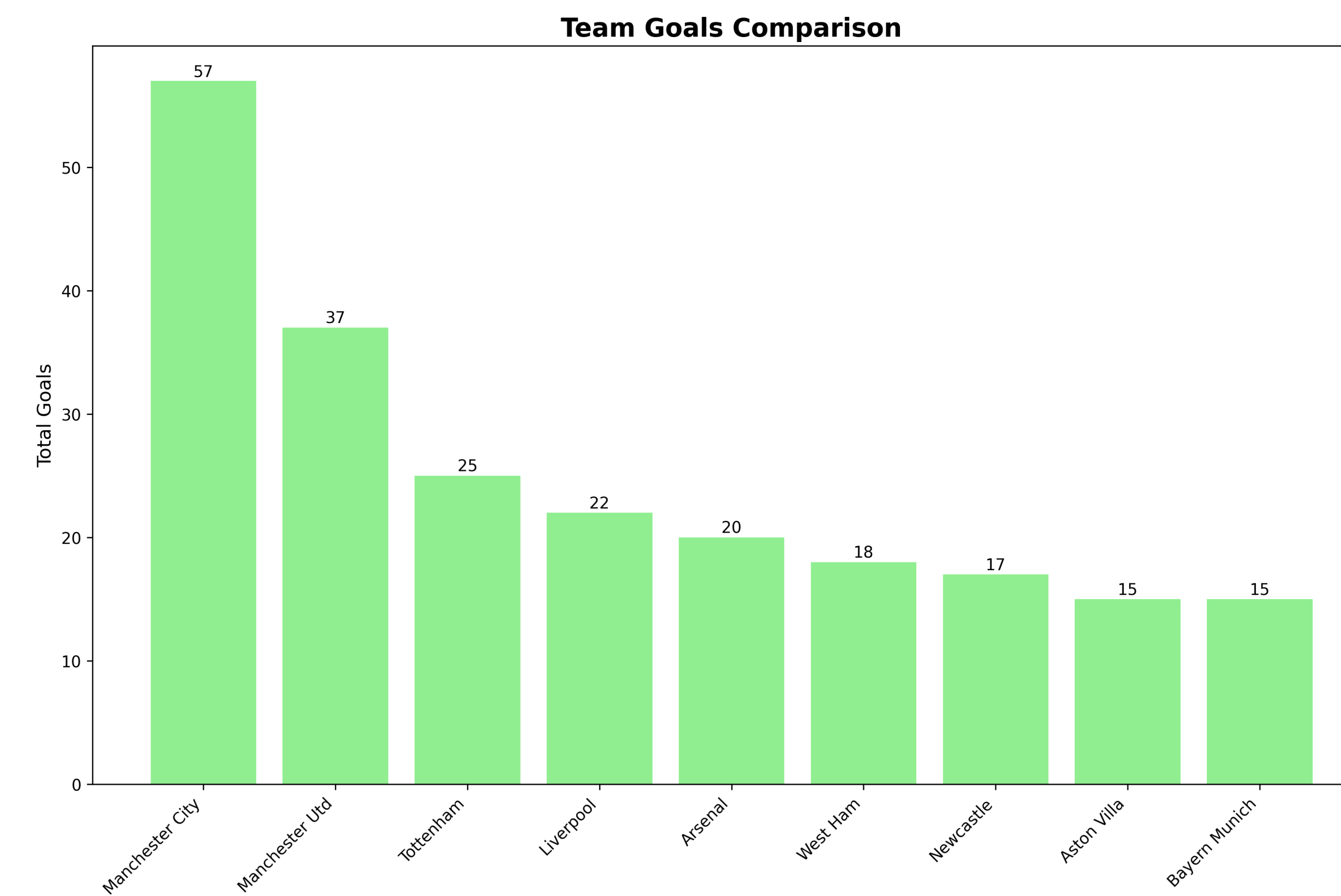


Fig. 1: Team Goals Comparison

## Top Goal Scorers

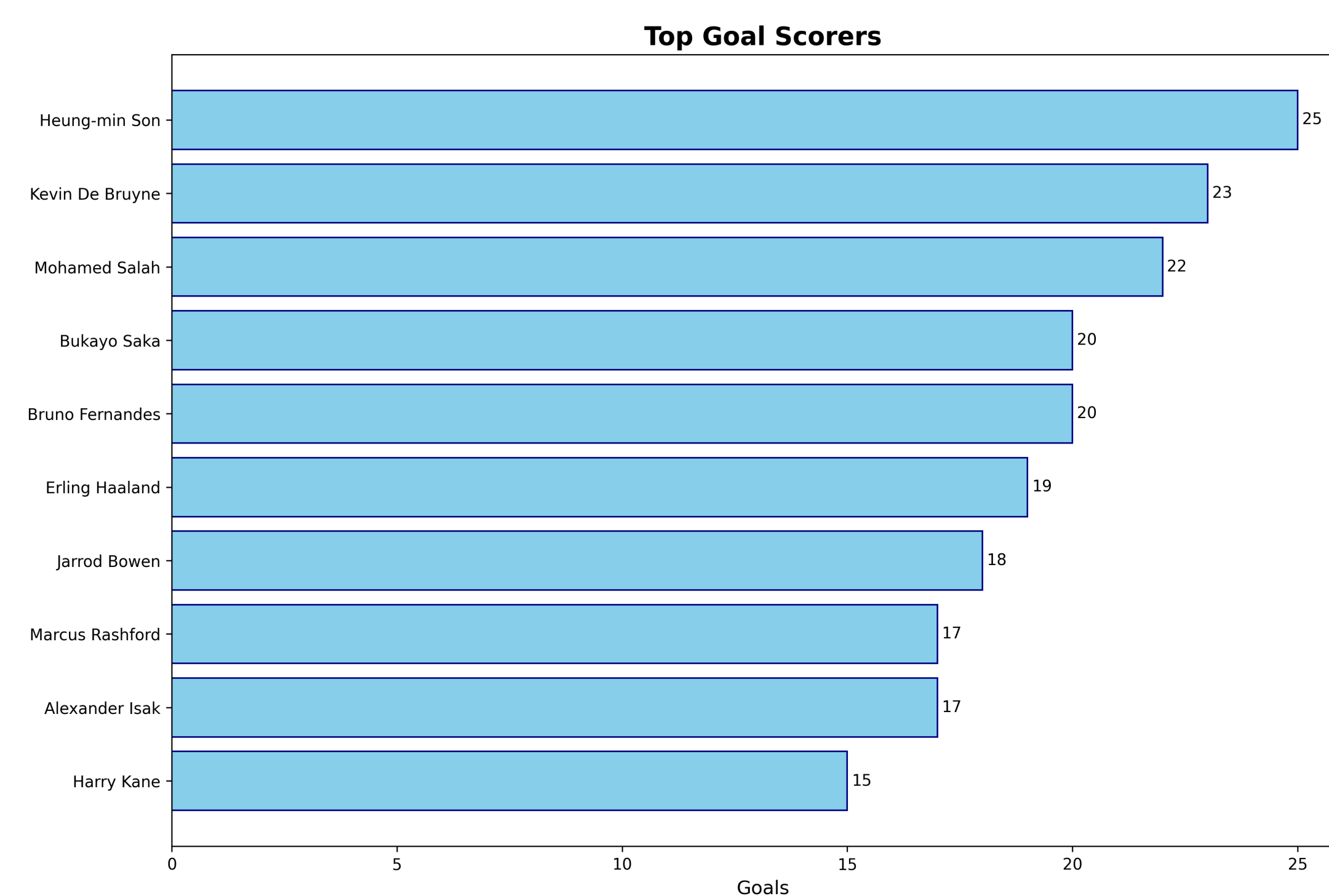


Fig. 2: Top Goal Scorers

## More Results

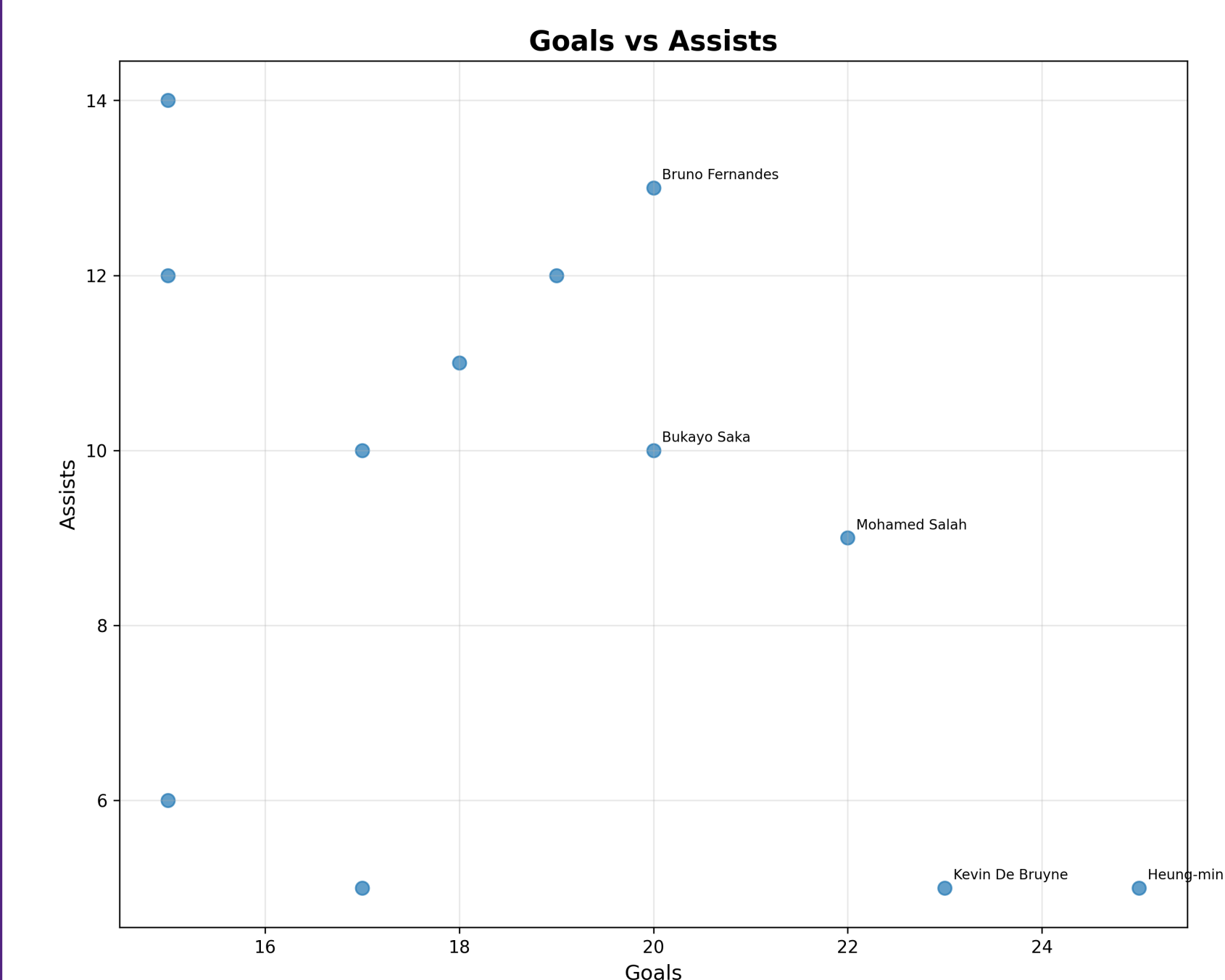


Fig. 3: Goals vs Assists Goals

## Future Work

- Analyze how defensive statistics might have an impact on a team.
- Research how a goalkeeper's stats can influence the team.
- Analyze the statistics of midfielders and their impact.
- Do a combined analysis based on all positions.

## Conclusion

- It was noticed that Manchester city scored the most goals.
- Heug-min Son had the most goals.
- The player with the most goals and assists was Mohamed Salah.
- Teams with the most goals had a top scoring player.

## References

- <https://fbref.com/>
- Sarlis, Vangelis, and Christos Tjortjis. 'Sports Analytics — Evaluation of Basketball Players and Team Performance'. Information Systems, vol. 93, Nov. 2020, p. 101562. ScienceDirect, <https://doi.org/10.1016/j.is.2020.101562>.