

Abstract

1. Proposed Objective:

- Player performance index
- Post-match team analysis

2. Societal Benefits:

- Player growth tracking
- Player comparison system
- Team v Team comparison
- Helping staff and team in analyzing opponents before match and study well
- Advanced training and preparation methods
- Helping in attracting fans and hence expanding the fan base of the sport

3. How is it different from other existing systems:

- Easy to understand Data Visualisation techniques
- Only including stats that matter
- Avoiding the use of misleading and incomplete data and using the existing data in the correct manner
- Problems faced currently -
 - 1) Wrong use of keeper's save percentage
 - 2) Conclusion of work rate from sprint speed and distance covered
 - 3) Misunderstanding the pass success rate
 - 4) Overrating Possession stats
 - 5) Judging player impact in the team sport
 - 6) Considering goals scored for analyzing a striker
- A more efficient analytical model with respect to the existing models

4. Prototype Description:

- Creating a model that analyzes the performance of players and then ultimately the team.
- Converting the onfield performance into a bunch of data represented into visual form.

5. Techniques Used:

- Big data analysis techniques
- Data Science using Python and R
- Machine Learning

6. Expected Outcome:

- An analytical model with better accuracy than other existing models
- Presenting the analytical data produced by the model in a very seamless way which will be attractive and easy to understand
- Deploying the model in the form of a smartphone application