**AI FOOTBALL ANALYSIS REPORT**

**1.Introduction**

The contemporary football universe has been revolutionized with the use of data analysis. Gone are the days when clubs were making decisions based on scouts' reports or the naked eye observation of talent. Instead, the use of data models allows for cheaper and better-informed judgment in player assessment, formation selection, and transfer strategy. The shift is especially important for financially constrained clubs or those competing in intensely competitive leagues.

**Research Objective and Key Questions**

The current study will build an all-around performance evaluation model for footballers in four important positions: Goalkeepers, Defenders, Midfielders, and Forwards. The objectives are:

* Creating position-specific performance metrics standardized to per 90 minutes.
* Identifying top performers based on well-balanced composite score models.
* Providing a platform through which scouts and managers are able to make evidence-based choices.
* Examining the financial implications and tactical uses of the type in real-world club environments.

**Key Questions:**

* In what ways do per-90 stats make comparisons of players more accurate and equitable?
* Which are the ideal statistics to measure each position?
* Are high-value players currently undervalued identifiable using these models?

**2.Literature Review**

Analysis of the performance of football players has become more popular over the recent years. Study works by Rein et al. (2017) and Decroos et al. (2019) present the utilization of event-based statistics and machine learning for prediction of player potential and match outcome. Literature also talks about pitfalls of traditional indicators like goals and assists utilized for midfielders or defenders in lieu of context-sensitive measures like Expected Goals (xG), Post-Shot Expected Goals (PSxG), or passing networks.

Moreover, scouting system research corroborates the transition to data-led pipelines as a means of reducing scouting bias and enhancing efficiency. The literature testifies to the merging of flexible and automated frameworks as optimal practice in football analytics.

**3.Methodology**

The dataset used for this report accounts for more than 500 players in the top 5 European football leagues for the 2024-2025 season. Data includes per-90-minute measurements for offense and defense positions:

* Midfielders: Assists, Interceptions, Tackles Won, Through Balls
* Forwards: Goals, Assists, Shots on Target
* Defenders: Interceptions, Clearances, Aerial Duels, Tackles, Blocks
* Goalkeepers: PSxG +/-, Save%, Clean Sheets, Sweeper Actions, Goals Conceded

All these values have been converted into per-90-minute rates for the purpose of fairness in comparison to unequal playing time.

**Statistical Modelling Approach**

Each role was assessed with a special weighted composite score intended to capture major responsibilities of that position. For instance:

Midfield Scores:

0.30 \* Assists + 0.25 \* Interceptions + 0.25 \* Tackles +0.20 \* Through Balls

Defensive\_Score, Forward\_Score, and Goalkeeper\_Score use similar multi-factor weighting structures. Copula dependency was not required, but deterministic weighted aggregation was used, with allowance for interpretability and flexibility to suit different team needs.

**4.Analysis and Results**

**Midfielders**

Their top performers were Rabby Nzingoula and Edoardo Bove, who both possessed elite defensive talents through high tackling and intercepting rates, irrespective of low rates of assisting. This revealed latent talent in players traditionally overlooked by traditional metrics.

**Forwards**

Top of the list was Thomas Cannon, not for goals, but for his shots on target per 90 minutes, suggesting high attacking activity and scoring potential with the right tactical formation.

**Defenders**

Alessandro Dellavalle was the top defender, with a defense rating of 2169, above league percentiles. His display in aerial duels, clearances, and interceptions placed him at the topmost position.

**Goalkeepers**

Joel Robles and Ivan Zlobin were highly placed by high PSxG+/-, save rate, and clean sheets because they possess good shot-stopping quality and tactical suitableness for build-up mechanisms.

**Visual Insights**

Position-leaderboards, percentile comparisons, and score distribution were shown in order to inform scouting, youth promotion, and contract negotiating decisions.

**5.Discussion and Conclusion**

**Summary of Findings**

The study was able to demonstrate convincingly how performance information, once weighted and standardized suitably, could identify outstanding players and uncover gems. The model allows clubs to quantify player contributions outside the traditional goal-oriented statistics.

**Implications for Football Stakeholders**

* Scouts: They can utilize the system to sort players by tactical suitability and role-specific statistics.
* Coaches: They get an idea of squad depth and substitute players.
* Executives: They can enhance contract negotiations, ROI determination, and strategic planning.
* Fan and Media: Visual insights can help tell stories and engage fans better.

**Recommendations**

* Deploy per-90 model-based performances within scouting and analytics groups.
* Refresh weightings of metrics on a regular basis in accordance with team tactics.
* Use the model for pre-transfer analysis and post-match analysis.
* Enhance the framework by adding spatial and tracking data to provide deeper insights.