

Core factors shaping player market value

Karolina Drewnik

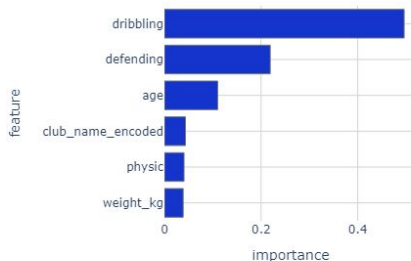


Player value is highly skewed

A few standout players dominate the market.

Most players clustered at lower values and a small group of "superstars" at extremely high values.

Features that contribute to 95% of the importance



Skills drive player's value

Player value is driven more by skills and personal characteristics, than by other factors like position or club.

Club affiliation remains somewhat important.

91% *correlation*

*between estimated value
and player's "potential"*

Complexity of composite metrics

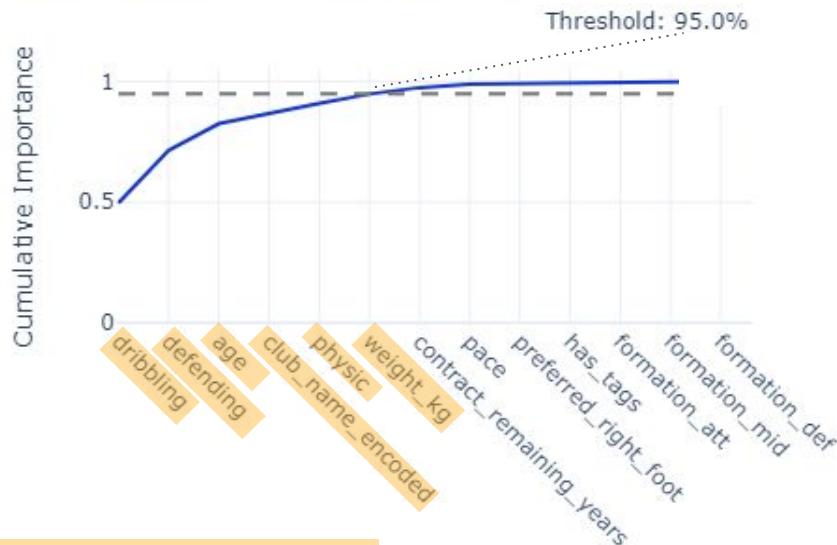
"Potential" and "overall" were excluded from deeper analysis.

Their nature makes it difficult to understand, and they may obscure more granular relationships.

Features importance based on Random Forest

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Cumulative Feature Importance



The most informative features

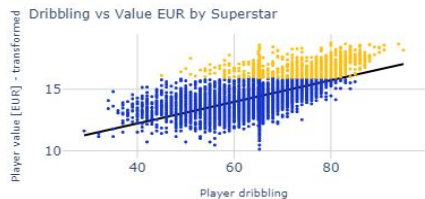
Cumulative feature importance shows how much the most important factors, when combined, contribute to accurate predictions.

Why this method

- Able to discover complex dependencies
- Easy to explain
 - Shows directions of the analysis
- Confidence about features impact
 - Model successfully **explains 82% of the factors** that determine a player's value
- Suitable for tabular data
- No need of huge resources

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- **Skills Are Key**

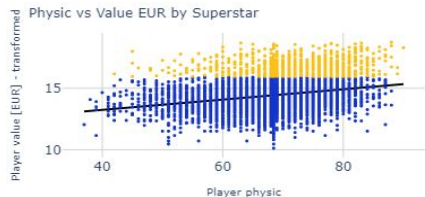
The most important factors driving player value are skill-related, with **dribbling** and **defending** being the top contributors.

These two alone account for more than **70% of a player's estimated value**.



- **Age Matters**

Age is another crucial factor, with younger players generally valued higher. It accounts for around **11% of the total importance** in estimating value



- **Additional Influences**

While skills and age are dominant, physical attributes like **weight** and **physique**, as well as the **club a player belongs to**, also play a role, though their impact is smaller.