



## The Best FIFA Football Awards 2020 The Best FIFA Men's Player 2020

**Carteret Analytics utilises its proprietary quantitative analysis to objectively determine the best men's professional football player during 2020. Guess what? Messi is still The Best...  
...but only just.**

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### Headlines

- **Messi** is still, objectively, the best player in world football. However, with a *Carteret Rating* of **317.4**, his objective performance levels in 2020 were only **2.2%** higher than **Robert Lewandowski** (who has a *Carteret Rating* of **310.3**).
- **Kevin De Bruyne** is the third best men's player in 2020, based on his objective performance levels, although, with a *Carteret Rating* of **297.9**, his levels are **6.1%** below **Messi** and **4.0%** below **Lewandowski**.
- There is then another significant drop in overall performance levels to fourth place **Harry Kane** (*Carteret Rating*: **274.9**). **Kane's** performance levels in 2020 have been **7.7%** below **De Bruyne**, and a substantial **13.4%** below **Messi**. **Kane** was injured for a number of matches during 2020, and it is interesting to speculate how much higher he might have been without the injury.
- Official '2020 Golden Boy' award winner, **Erling Haaland**, completes the Top 5 with a *Carteret Rating* of **272.3**. Still only 20 years old, this represents a remarkable level of objective performance. He has recorded the best year-on-year improvement of any player in the Top 15.
- **Salah** (**268.0**), last year's Best FIFA Men's Player runner-up, **Van Dijk** (**264.6**), **Benzema** (**262.0**), **Mané** (**254.2**) and **Werner** (**242.4**) round out the Top 10; and is, perhaps, reflective of Liverpool's success in the Premier League during 2020.
- **So where's Ronaldo?** Based on his objective performance levels in 2020, **Ronaldo does not even make the Top 10**. His *Carteret Rating* of **235.5** is only the 11th best rating in 2020, and a massive **25.8% below Messi**.
- Other players, such as **Neymar** and **Mbappé**, who have rated highly in previous Best FIFA Men's Player awards, only rank 14th in the case of **Neymar** (*Carteret Rating*: **184.7**) with **Mbappé** not even making the Top 15 (he rated 16th, with a *Carteret Rating* of **181.3**).

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## 'Top 15' players - The Table

As part of the decision-making process for The Best FIFA Men's Player award 2020, there is an initial 11-man shortlist. This shortlist is then voted-on by journalists, fans, national team coaches and captains to decide who is awarded The Best FIFA Men's Player at a ceremony that will be held on 17 December 2020.

Carteret Analytics has taken a similar approach, by identifying a shortlist to incorporate players based on both their objective performance levels in our quantitative modelling, and a data-driven analysis of the quantity and detail of media coverage each player over the course of 2020.

Nevertheless, whilst the basis for identifying the 30-man shortlist is a combination of quantitative modelling and media coverage, the assessment of the performance levels of those 30 players is based purely on the objective quantitative analysis provided by Carteret Analytics to football clubs worldwide. It objectively measures the contribution of each player to his team winning matches (see 'A little bit of science...' below).

Exhibit 1: Table outlining the Top 15 men's football players of 2020, based on their objective performance levels

CarteretAnalytics The Carteret Rankings - Top 15 Men's Players in 2020			
Rank	Player	Team	Carteret Rating
1	<b>Messi</b>	Barcelona	<b>317.4</b>
2	<b>Lewandowski</b>	Bayern Munich	<b>310.3</b>
3	<b>De Bruyne</b>	Manchester City	<b>297.9</b>
4	<b>Kane</b>	Tottenham	<b>274.9</b>
5	<b>Haaland</b>	Borussia Dortmund	<b>272.3</b>
6	<b>Salah</b>	Liverpool	<b>268.0</b>
7	<b>Van Dijk</b>	Liverpool	<b>264.6</b>
8	<b>Benzema</b>	Real Madrid	<b>262.0</b>
9	<b>Mané</b>	Liverpool	<b>254.2</b>
10	<b>Werner</b>	Chelsea	<b>242.4</b>
11	<b>Ronaldo</b>	Juventus	<b>235.5</b>
12	<b>Alcântara</b>	Liverpool	<b>225.0</b>
13	<b>Thomas Müller</b>	Bayern Munich	<b>217.3</b>
14	<b>Neymar</b>	Paris Saint Germain	<b>184.7</b>
15	<b>Dybala</b>	Juventus	<b>183.0</b>

Source: Carteret Analytics, London

## A little bit of science...

At Carteret Analytics we have developed the quantitative analysis utilised to good effect in investment banking for trading strategy, portfolio optimisation, derivatives pricing and hedging, and risk management by our sister corporate finance firm, Carteret Capital - and applied it to football.

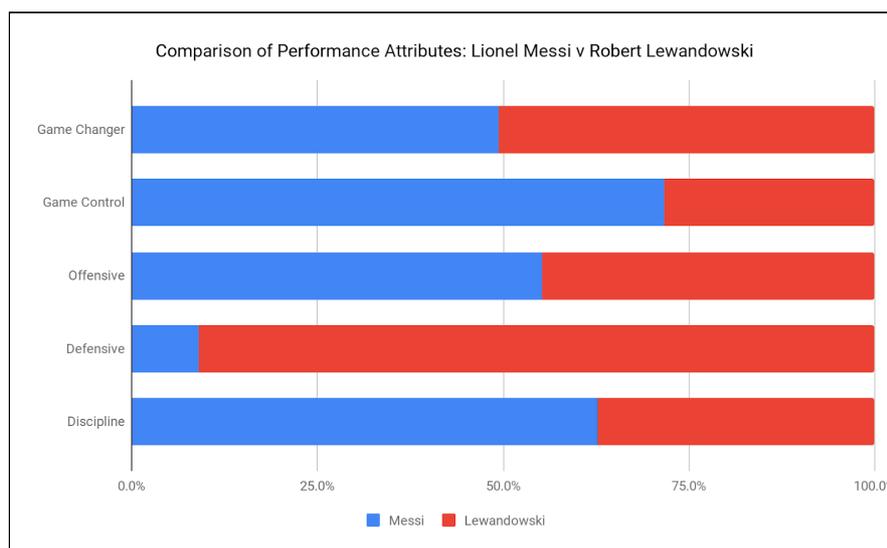
**In particular, our work provides an objective measure of how good a football player really is - removing all the subjective noise and opinions.**

An integral part of the analysis is to calculate a **Carteret Rating<sup>4</sup>** for every football player, which rates and values a player's contribution to his team winning football matches. It is incredibly accurate at predicting a player's capabilities. Indeed, we always start with the premise that a professional football club's primary objective is to win matches - and therefore the more a player contributes to his team winning matches, the better the player.

## Comparison of the 'Top 3' players - Messi, Lewandowski and De Bruyne

The following charts make reference to a player's *Attributes*, and these *Attributes* - *Game Changer*, *Game Control*, *Offensive*, *Defensive* and *Discipline* - are defined in detail in the **Glossary** at the foot of this Research Paper.

Exhibit 2: Horizontal stacked bar chart illustrating **Messi's** *Attribute* percentiles vs **Lewandowski**



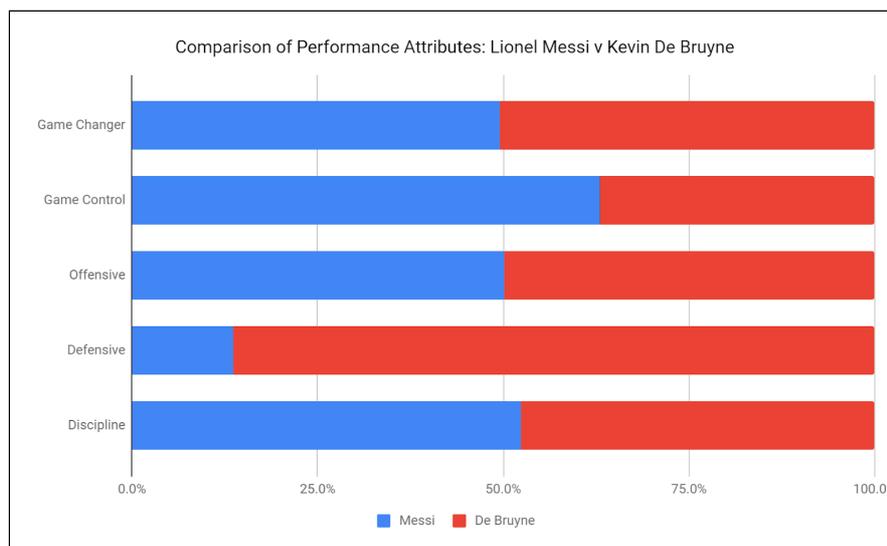
Source: Carteret Analytics, London

- Exhibit 2 (above) illustrates **Messi's** relative success in the key performance *Attributes*, compared with **Lewandowski**.

<sup>4</sup>Carteret Rating: this is a proprietary method of determining how good a player really is. It is a significant and leading-edge algorithm. We assess a player by identifying every match in which he has been involved (for which we have data) and identifying the key events in each and every one of those matches. These Key Match Events ("KMEs") are events that led to a goal being scored; could have led to a goal being scored; led to a goal being conceded; or could have led to a goal being conceded. Then, for each and every KME, in each and every single match, we analyse that player's contribution to each of those KMEs. This is a substantial piece of analysis, and one which produces a unique Carteret Rating for the player. It is a dynamic rating, and it changes with each additional match played.

- The quantitative analysis indicates that **Messi** demonstrates stronger *Game Control* and *Discipline* attributes when compared to **Lewandowski**, but the Bayern Munich centre-forward offers his team significantly more in his *Defensive* performance attributes.

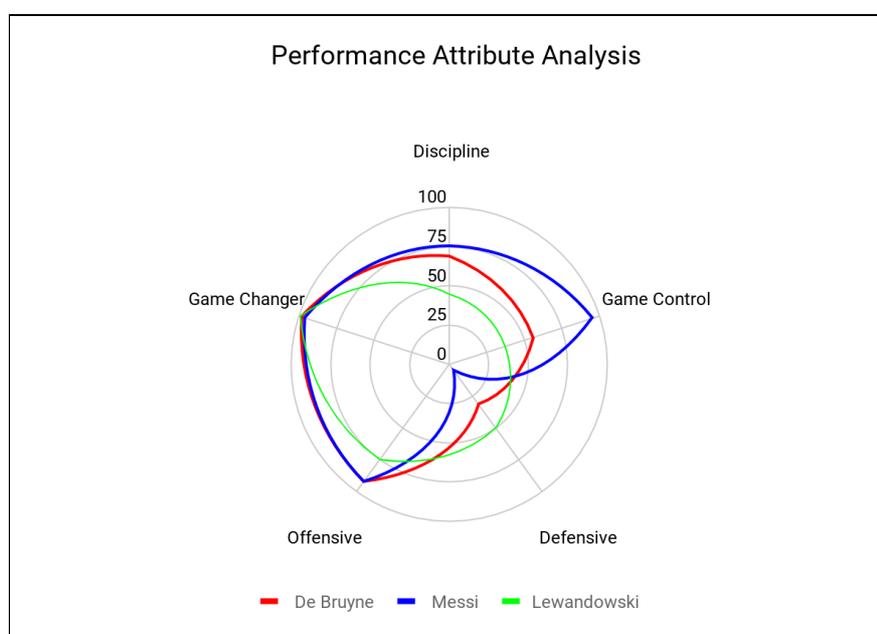
Exhibit 3: Horizontal stacked bar chart illustrating **Messi's Attribute** percentiles vs **De Bruyne**



Source: Carteret Analytics, London

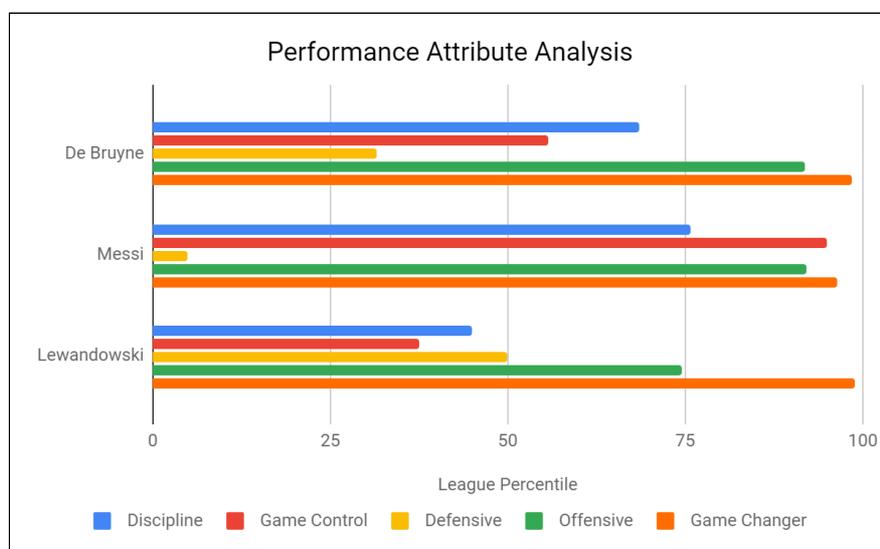
- Exhibit 3 (above) illustrates **Messi's** relative success in the key performance *Attributes*, compared with **De Bruyne**.
- It is, again, **Messi's** *Game Control* attribute which sets him apart from **De Bruyne**. This is possibly because he is pivotal in a number of successful *KMEs* (see **Glossary**) for Barcelona.
- By comparison, **De Bruyne** offers his team significantly more in *Defensive* matchplay scenarios.

Exhibit 4: Radar chart comparing the performance *Attributes* of **Messi**, **Lewandowski** and **De Bruyne**



- The radar chart in Exhibit 4 (above) provides a direct comparison of the performance *Attributes* of the 'Top 3' award nominees.
- All three players have exceptional *Game Changer* attributes and can all transform a match, but it is **Messi's** stronger *Game Control* attribute which suggests he has a greater influence when his team needs to contain a match.
- **Messi's** strong *Offensive* attributes are at the expense of his *Defensive* attributes. The quantitative analysis suggests that, of the three nominees, he is least effective in *Defensive* matchplay scenarios.

Exhibit 5: Horizontal bar chart displaying the performance *Attributes* of **Messi**, **Lewandowski** and **De Bruyne**



Source: Carteret Analytics, London

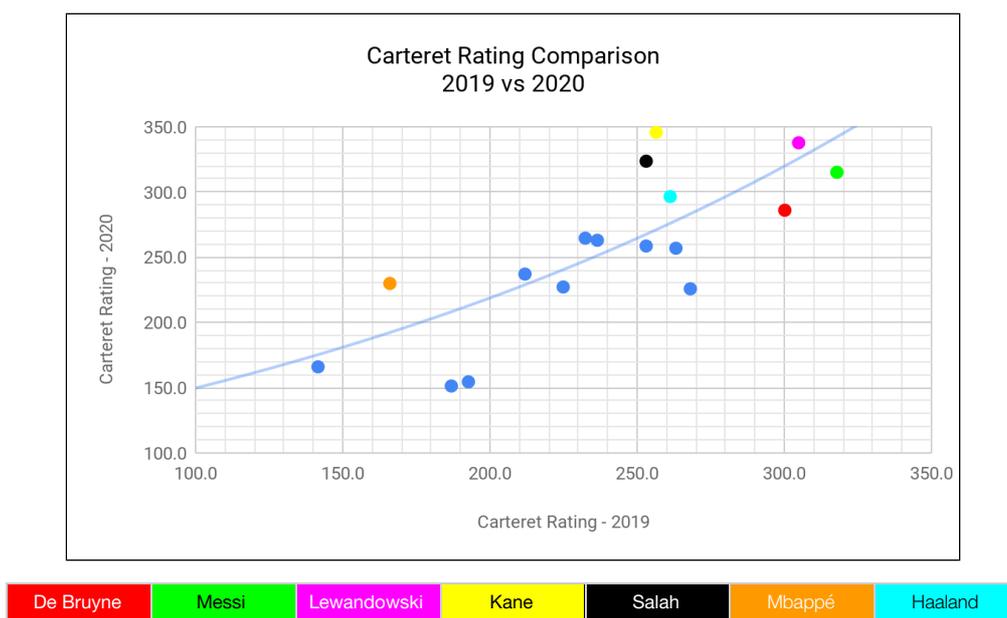
- The horizontal chart in Exhibit 5 (above) also provides a direct comparison of the performance *Attributes* of the 'Top 3' award nominees.
- **Lewandowski's** *Carteret Rating* is impacted by his lower comparable *Discipline* attribute. The quantitative analysis shows that this is a relative weakness of the player. For example, whilst he has only been sent-off once in the past eleven seasons in the German Bundesliga, he has received thirty yellow cards.

## Comparison of player performances between 2019 and 2020

- In Exhibit 6 (below), if a player is plotted above the trend-line this indicates that their objective performance levels appear to be increasing year-on-year, and, by contrast, if a player is plotted below the trend-line this indicates that their objective performance levels appear to be decreasing year-on-year.
- We can see from Exhibit 6 that, despite his age (32), **Robert Lewandowski** continues to increase his performance levels year-on-year.
- By contrast, 2019 Best FIFA Men's winner **Lionel Messi** remains consistent with his very high objective performance levels year-on-year. We can, however, start to identify a slight decrease in performance levels between 2019 and 2020.

- The chart also shows that **Kevin De Bruyne** is struggling to replicate the same standard of performance as last season, albeit his 2020 performances still remain as one of the strongest of the award nominees.

Exhibit 6: Scatter graph plotting the *Carteret Rating* for each Carteret Analytics best player nominee during 2019 and 2020



Source: Carteret Analytics, London

## About Carteret Analytics

Carteret Analytics is part of the Carteret Group of companies, based in the City of London, New York and Geneva. It provides leading-edge quantitative analysis and commercial analytics to clients worldwide, with particular expertise in the sports sector. In football our work includes player rating and valuation, head coach assessment, team performance analysis, and applying proprietary analytics to transform commercial revenues.

### Further information and contact details

If you have any questions, or would like to enquire about further services provided by the Carteret Group, then please feel free to contact one of the team members listed below.

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## Glossary to this Research Paper

### Carteret Rating

This is a proprietary and objective method of determining how good a football player really is (and aims to accurately predict future performance in various scenarios set by the football club). It is based on a series of leading-edge algorithms that have been developed by Carteret Analytics. These algorithms have evolved from the quantitative analysis utilised in investment banking by its sister company, Carteret Capital, for, inter alia, asset and equities trading strategies, pricing and hedging of derivatives, portfolio optimisation and risk management. The algorithmic methodology assesses each player by identifying every match in which he/she has been involved (for which we have data) and then identifying and isolating the Key Match Events (“KMEs”) in each and every one of those matches. Then, for each and every KME, in each and every single match, we analyse that player’s contribution to each of those KMEs. This is a substantial piece of analysis, and one which produces a unique *Carteret Rating* for the player.

It is a dynamic rating, and it changes with each additional match played. Its ‘beauty’ is in its pure objectivity - ignoring characteristics such as age and nationality, and avoiding the ‘noise’ of subjective considerations that are frequently taken into account (often wrongly) in trying to determine the ability, attributes, characteristics and the ‘fit’ of a player into the club style or systems. It is an exceptionally accurate rating, with an *r-squared value* between 0.88-0.90 for Premier League players - demonstrating that it is very precise at predicting how good a player will be in the future. The dynamic nature of the Carteret Rating also enables Carteret Analytics to accurately predict the impact of the player in different clubs and different leagues.

### Attribute

In addition to a player’s Carteret Rating, we are also able to break down a player’s performance into a number of Attributes - Game Changer, Game Control, Offensive, Defensive and Discipline. This provides greater clarity on the player’s strengths and weaknesses, and enables us to provide insights into **how** the player actually contributes to increasing the probability of his team winning matches. Where the Carteret Rating provides the overall (objective) measure of the player’s performances, the Attributes allow us to peel back the layers of those performances - to identify strengths and weaknesses, but also to help us understand how he might fit into preferred styles and formations. These Attributes have been quantitatively constructed based on rigorous data testing, to provide an accurate representation of how a number of KMEs can be combined to build a picture of how a player can best contribute in a match to increase the probability of the team winning.

The **Game Changer** Attribute measures a player’s creation of, or contribution to, specific KMEs that were demonstrated to move the in-match position to a better score position (weighted against the extant opposition score position), or to retain a score position in circumstances where there was a material probability that the score position could have moved against the player’s team.

The **Game Control** Attribute measures a player’s ability to maintain a positive score position, and avoid a reduced or negative score position, through a variety of in-match scenarios such as proactive ball control and movement, maintenance of possession, and transitioning between offensive, defensive and ‘special teams’ types of play (moving the ball and gameplay away from dangerous scenarios in a positive score position, late in the match). It is a good measure of tactical leadership on the pitch, and it is an extremely beneficial Attribute for teams that value a possession based style of play as well as those teams that need to contain the game for periods of time.

The **Offensive** Attribute measures a player's ability to create and contribute to 'positive' KMEs that actually provided an incremental step to offensively maintain an in-match score position or to positively transform an in-match score position. This will involve forward play, as well as play in a offensively forward zone. Likewise, the **Defensive** Attribute measures a player's ability to create and contribute to 'protecting and continuing' KMEs, i.e. to avoiding a reduced and/or negative in-match score position. All players will have both an Offensive and Defensive Attribute, whatever their position, and these Attributes (as with all Attributes) are generally measured against a League Percentile of other players in the same position (in a particular league). High levels for both the Offensive and Defensive Attributes often indicate a player's [strong] ability to transition quickly and effectively between attack and defence (and vice-versa).

The **Discipline** Attribute is a useful measure of a player's ability to avoid losing control of various aspects of a match and to avoid reducing the options of the team to maximise the probability of winning future matches because he has been suspended through poor Discipline. Poor in-match Discipline often leads to loss of possession, and frequently leads to negative KMEs. It is usually measured on charts *in the positive* - i.e. on radar charts or bar charts set against the League Percentiles for the Attribute, a player whose Discipline is in the bottom 25th League Percentile has a poor Discipline Attribute.

## League Percentiles

The mechanism to measure and rate a player against their peers (usually in the same position) in a particular league. References are often made to the lower 25th League Percentile (which indicates a poor performance measure), 50th League Percentile (which is the average measure), and in the 75th League Percentile (which indicates high performance - in the top 25% of players in that League).

## Key Match Events ("KMEs")

Key Match Events ("KMEs") are events that we have identified (through constant quantitative testing) as having the greatest influence on the outcome of a football match. Our current quantitative modelling includes 42 KMEs, and in very general terms these are events that, to varying degrees, lead to a goal being scored; could lead to a goal being scored; lead to a goal being conceded; or could lead to a goal being conceded. The *Carteret Rating* - which is obviously the proprietary objective measure that permeates everything that we do - measures a player's creation and contribution to each and every KME, in each and every match for which we have data on that player. This is a huge piece of data analysis, and is the reason why the *Carteret Rating* is so accurate and predictive.