



Sky Sports

'In Demand' Football Head Coaches - Quantitative Analysis

Antonio Conte
Graham Potter
Brendan Rodgers
Thomas Tuchel
Mauricio Pochettino
Jose Mourinho
Zinedine Zidane
Julian Nagelsmann
Luis Enrique

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1. How do the objective performance levels of the head coaches compare with each other?

The table at Exhibit 1 (below) summarises the key quantitative ratings and metrics for a selection of head coaches. **Antonio Conte**, **Graham Potter**, **Brendan Rodgers** and **Thomas Tuchel** are included primarily as comparators, but (with the exception of **Tuchel**) they are available for new roles and attract media speculation in that regard. **Jose Mourinho** has been mentioned as a possibility for a return to Chelsea, and **Pochettino**, **Zidane**, **Nagelsmann** and **Enrique** have been touted as permanent head coach candidates for both Chelsea and Tottenham. An explanation of the ratings and metrics is provided in the [Glossary](#) in Section 12 of this Overview.

Exhibit 1: Table outlining the ratings for each head coach, including quantitative metrics indicating relative strengths and weaknesses (as at 6 April 2023)

| Manager Name | Carteret Manager Rating | CMR CI | Normalised CMR | Strategic Intelligence Rating (Home) | Strategic Intelligence Rating (Away) | Strategic Intelligence Rating | Tactical Command Rating (Home) | Tactical Command Rating (Away) | Tactical Command Rating | Attacking Coefficient (Home) | Attacking Coefficient (Away) | Attacking Coefficient | Success-adjusted Attacking Coefficient (Home) | Success-adjusted Attacking Coefficient (Away) | Success-adjusted Attacking Coefficient | Shot Conversion Rating | Opposition Shot Conversion Rating | Shot Creation Ratio | Possession: Goal Conversion (Home) | Possession: Goal Conversion (Away) | Possession: KME Creation (Home) | Possession: KME Creation (Away) | Overall Possession (Home / Away) |
|---------------------|-------------------------|--------|----------------|--------------------------------------|--------------------------------------|-------------------------------|--------------------------------|--------------------------------|-------------------------|------------------------------|------------------------------|-----------------------|---|---|--|------------------------|-----------------------------------|---------------------|------------------------------------|------------------------------------|---------------------------------|---------------------------------|----------------------------------|
| Antonio Conte | 458.20 | 0.94 | 461.90 | 38.24 | 23.53 | 61.76 | 2.68 | 1.18 | 3.85 | 11.46 | 10.65 | 22.11 | 8.82 | 4.87 | 13.69 | 33.81 | 25.30 | 1.33 : 1 | 4.23 | 3.42 | 12.26 | 9.29 | 52 / 50 |
| Graham Potter | 236.60 | 0.86 | 242.20 | 28.43 | 22.55 | 50.98 | 1.56 | 1.24 | 2.79 | 11.11 | 10.65 | 21.75 | 6.22 | 4.94 | 11.16 | 27.23 | 27.12 | 1.25 : 1 | 2.83 | 2.21 | 9.40 | 7.92 | 55 / 55 |
| Brendan Rodgers | 322.30 | 0.81 | 332.30 | 17.65 | 16.67 | 34.31 | 0.15 | 0.12 | 0.26 | 9.69 | 10.75 | 20.44 | 3.58 | 3.41 | 7.00 | 45.95 | 34.77 | 0.86 : 1 | 2.93 | 3.58 | 8.65 | 7.39 | 52 / 50 |
| Thomas Tuchel | 505.20 | 1.12 | 496.70 | 28.43 | 29.41 | 57.84 | 1.82 | 1.29 | 3.12 | 11.11 | 9.63 | 20.74 | 6.32 | 6.00 | 12.32 | 34.34 | 31.77 | 1.54 : 1 | 2.56 | 2.83 | 8.54 | 7.68 | 64 / 63 |
| Mauricio Pochettino | 464.80 | 1.09 | 458.70 | 44.74 | 30.70 | 75.44 | 2.97 | 2.53 | 5.50 | 13.07 | 11.75 | 24.82 | 11.77 | 7.18 | 18.95 | 43.43 | 27.69 | 1.54 : 1 | 4.19 | 3.37 | 9.40 | 8.69 | 62 / 64 |
| Jose Mourinho | 365.70 | 0.91 | 370.50 | 29.41 | 25.49 | 54.90 | 1.18 | 1.76 | 2.94 | 9.69 | 11.11 | 20.79 | 6.03 | 5.39 | 11.43 | 27.52 | 26.14 | 1.42 : 1 | 2.70 | 2.68 | 11.97 | 8.20 | 50 / 49 |
| Zinedine Zidane | 502.90 | 1.75 | 455.00 | 36.84 | 36.84 | 73.68 | 1.89 | 2.63 | 4.53 | 12.98 | 12.75 | 25.73 | 9.35 | 9.66 | 19.01 | 41.59 | 23.03 | 1.49 : 1 | 3.09 | 3.10 | 8.09 | 7.60 | 59 / 60 |
| Julian Nagelsmann | 420.00 | 0.87 | 429.20 | 67.65 | 30.39 | 98.04 | 2.29 | 1.47 | 3.76 | 10.14 | 10.34 | 20.49 | 13.05 | 5.88 | 18.93 | 40.54 | 30.76 | 2.13 : 1 | 4.43 | 4.04 | 12.57 | 10.03 | 68 / 63 |
| Luis Enrique | 568.80 | 4.36 | 330.10 | 47.13 | 34.48 | 81.61 | 3.10 | 3.14 | 6.24 | 13.56 | 13.32 | 26.87 | 12.29 | 9.51 | 21.80 | 39.43 | 21.69 | 1.82 : 1 | 5.25 | 3.89 | 12.07 | 10.85 | 67 / 64 |

| | |
|--|--------------------------------|
| | Key Metric - Upper Tier |
| | Key Metric - Middle Tier |
| | Key Metric - Lower Tier |
| | Secondary Metric - Upper Tier |
| | Secondary Metric - Middle Tier |
| | Secondary Metric - Lower Tier |

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2. Quantitative Analysis: Overall Rankings

- We have combined the Normalised Carteret Manager Rating (which takes account of extended periods of winning matches) with a number of the key metrics for each head coach, to be able to rank each head coach in this study in terms of their overall objective performance levels.
- The overall rankings are as follows:
 1. **Mauricio Pochettino**
 2. **Zinedine Zidane**
 3. **Julian Nagelsmann**
 4. **Thomas Tuchel**
 5. **Antonio Conte**
 6. **Luis Enrique**
 7. **Jose Mourinho**
 8. **Brendan Rodgers**
 9. **Graham Potter**
- We have broken down a number of the quantitative metrics to give an objective sense of the strengths and weaknesses for each head coach in this paper (see below). Nevertheless, in pure objective terms, if the recruitment teams at Chelsea and Tottenham want the best head coach from this list then the quantitative analysis suggests that **Pochettino** should be top of their list.

3. Antonio Conte: Often referred to as a “serial winner” but...

- In terms of his ability to win matches over an extended period of time in recent years, **Conte is second only to Tuchel**. This is important because when a club is seeking to appoint a new head coach it wants to maximise the probability of that *history of winning* continuing into the future.
- **Mourinho** is an example of a head coach that has had an extended period of winning matches, but less so in recent years. His trajectory is on the decline in this regard, and the danger is that a club may consider appointing him based on a historical winning record that has a limited objective bearing on his ability to win at a very high level over the next few years.
- The quantitative analysis indicates that **Conte's** ability to set-up for forthcoming matches to maximise the chances of winning those matches (*Strategic Intelligence*) is only average among this group of head coaches. For instance, he is **59% less effective** in this regard than **Nagelsmann**. This suggests that **Conte** has a less effective understanding of how he can win his next match.
- Similarly, **Conte's Tactical Command Rating (3.86)** is equally average among this group of head coaches, which indicates that he is not especially strong at transforming a football match (during the match) to achieve an incrementally better outcome. By comparison, **Pochettino (5.50)** and **Enrique (6.24)** are much more effective at transforming match outcomes during a match.
- His average ratings for *Strategic Intelligence* and *Tactical Command* suggest that **Conte's** relative lack of understanding on how to set-up and transform matches (compared to other head coaches at the top level) might manifest a level of frustration if results start to go against the team. **Conte's** reputation

for 'falling-out' with club ownership and leaving clubs in an acrimonious manner (as seen recently at Tottenham) might be a consequence of this frustration.

- Likewise, the quantitative analysis shows that **Conte** has a relatively defensive style of play (*Attacking Coefficient* of **22.11**), and that this has fairly limited success in terms of contributing to the winning of football matches. In addition, **Conte's Shot Creation Ratio** is relatively low. These metrics are often not helpful in gaining continued support from the club's fans during spells of more challenging match results.
- Overall, the quantitative metrics appear to support a proposition that **Conte** can galvanise players for a limited period of time to achieve good match results, but when results become less successful his lack of understanding on how to transform the position leads to frustration and acrimony with the players, club and supporters. If a club has medium or long term objectives in appointing a head coach, then **Conte** does not appear to be the best option.

4. **Graham Potter: So what did Chelsea actually see in his performance levels?**

- One of the big advantages of the quantitative analysis is that, for head coaches who have previously managed at clubs that are in different leagues or at clubs that are in lower positions within the same league (such as **Potter** at Brighton), you can look at the specific metrics (such as *Strategic Intelligence* and *Tactical Command*) to get an objective sense of the head coach's potential to succeed at the higher level club. This is because it provides an indication of the *football intelligence* of the head coach - which empirical evidence suggests is a transferable skill between clubs.
- **Potter** has the second lowest level of *Strategic Intelligence* (**50.98**) and *Tactical Command* (**2.79**) among this group of head coaches. This does not indicate that he was destined to succeed at Chelsea. Indeed, a number of commentators suggested that **Potter** 'looked lost' at times during his tenureship at Chelsea, and the objective metrics seem to bear that out.
- **Potter** also has a relatively low *Attacking Coefficient* (**21.75**), and the second lowest level of success from that *Attacking Coefficient* (**11.16**). This more defensive style of play, compounded also by a low *Shot Creation Ratio* (**1.25:1**), offers little protection from the ire of supporters when results do not go well.
- Of course, a defensive style of play can be successful but **Potter** has the lowest overall rating of any of these head coaches - so clearly it is not proving successful at this level - and he has the lowest overall levels of success in converting *Possession* to either key match events or to goals.
- **Potter** does seem to be highly regarded by some stakeholders in professional football, including other head coaches such as Pep Guardiola, but the objective metrics do not suggest that he has the capabilities at this highest level of football competition.

5. **Brendan Rodgers: Are Tottenham really interested in him?**

- If so, then it is difficult to determine - from his objective performance levels - how **Rodgers** is going to succeed at Tottenham.
- From an ownership perspective there is nothing in the quantitative metrics for **Rodgers** to suggest that he has a sufficiently high level of *football intelligence* (compared to the alternative head coaches). He has the lowest Strategic Intelligence Rating (**34.31**) of any of the head coaches, and his *Tactical Command Rating* (his ability to transform matches, during the match, to an incrementally better outcome) is exceptionally low (**0.26**).
- If you compare this *Tactical Command Rating* to **Enrique** (**6.24**), or even **Conte** as the previous head coach at Tottenham (**3.85**), **Rodgers** looks well short in achieving the expectations of club ownership.

- From a supporter perspective **Rodgers** has an *Attacking Coefficient* that is **8% more defensive** than **Conte**, and the success that **Rodgers** achieves from that lower *Attacking Coefficient* is **95% lower** than **Conte**. Indeed, **Rodgers'** success levels are over **311% lower** than **Enrique** in respect of his *Attacking Coefficient*.
- This is then compounded further by **Rodgers** having the **lowest Shot Creation Ratio** of any of these head coaches. Indeed, it is essentially a negative *Shot Creation Ratio* (**0.86:1**), meaning that **Rodgers'** teams create less shots on goal than the opposition team.

6. Thomas Tuchel: Wins matches for extended periods, but how smart is he really?

- **Tuchel** is probably the best of this group of head coaches in demonstrating the ability to win matches over extended periods in recent years.
- The term 'recent years' is important because it is more instructive in determining the probability of this winning trait continuing over a future period (e.g. the next three full seasons).
- **Tuchel's Normalised Carteret Rating (496.70)**, which measures this extrapolation of probable success in winning matches for extended periods in the future, is over **200% higher** than his successor, **Potter (242.20)**.
- Interestingly, **Tuchel's football intelligence** levels are not especially exceptional in this group of head coaches. His *Strategic Intelligence Rating (57.84)* and *Tactical Command Rating (3.12)* are generally comparable to **Conte** and **Mourinho** (both predecessors at Chelsea), but moderately better than **Potter** (his successor).
- As with **Conte**, when results become more challenging, **Tuchel** is not as objectively able at *understanding* how to arrest the poor results (through preparation for the next match and/or transformation of a match position) as, say, **Pochettino**, **Nagelsmann** or **Enrique**.
- Again, as with **Conte** (and **Mourinho**), this can become frustrating for **Tuchel** and is possibly a symptom of why **Tuchel** appears to leave clubs after a specific period and with a degree of acrimony (e.g. PSG and Chelsea).
- The other metrics that stand out for **Tuchel** are not especially strong by comparison with a number of the other head coaches in the group, and, as with **Conte**, will exacerbate dissatisfaction among supporters if results turn for the worse.
- For example, **Tuchel's Attacking Coefficient** is low compared to a number of the other head coaches, and he does not achieve a particularly high level of success from playing a more defensive style of play.
- **Tuchel** does have a high level of *Possession* in matches, but the quantitative analysis illustrates that not only is this *Possession* somewhat defensive but it is also not especially effective at contributing to key match events or goals. In fact, **Tuchel** has **the lowest ratings for success** created by *Possession* for any of the head coaches in the study.

7. Mauricio Pochettino: Why has he not yet been snapped-up?

- **Pochettino** plays with a relatively high level of possession (c.**63% on average**), but his teams are not as effective at utilising these levels of *Possession* to create key match events or score goals - compared to, say, **Nagelsmann** and **Enrique**.
- **Pochettino** does win a large number of matches, but *Possession* is not the leading factor in achieving these results. He has a **high level of success** from an *Attacking Coefficient* that is significantly offensive in approach which, in combination with the objective analysis of his [lower] success from *Possession* alone, indicates that he achieves most success from quick transitional play.

- This is complemented by a **good Shot Creation Ratio** and a **very high Shot Conversion Rating**. **Pochettino's** teams are incisive at periods within a match, and this achieves exceptional results.
- **Pochettino** also demonstrates **excellent football intelligence**, with **high levels** of both *Strategic Intelligence* (**75.44**) to set-up for the next match to maximise the probability of winning it (third only to **Nagelsmann** (**98.04**) and **Enrique** (**81.61**)); and *Tactical Command* (**5.50**) - second only to **Enrique** (**6.24**) - for his excellent ability to transform matches to a better outcome during the match.
- With such high levels of objective performance, it is a wonder why he has not had a head coach position since he left PSG in the summer of 2022? He certainly offers better performance levels across a number of metrics than **Conte** and **Potter** - which suggests he would be a significant step-up for both Tottenham and Chelsea respectively.

8. Jose Mourinho: It won't be Spurs Part II, but Chelsea Part III...?

- Speculation continues that **Mourinho** is under consideration for a return to Chelsea. What might he offer?
- Well, compared to the other head coaches in this study, not a huge amount.
- As mentioned earlier in this paper, **Mourinho's** ability to create extended periods of winning football matches has diminished dramatically in recent years. The objective measure (*Normalised Carteret Manager Rating*) for **Mourinho** (**370.50**) is significantly lower than **Nagelsmann** (**429.20**), **Zidane** (**455.00**), **Pochettino** (**458.70**), **Conte** (**461.90**) and **Tuchel** (**496.70**).
- **Mourinho** has one of the **lowest Attacking Coefficients** (**20.79**) in this group of head coaches, which supports a common perception that **Mourinho** has a defensive style of play. What is perhaps less appreciated, however, is that this defensive style of play is not especially successful for **Mourinho's** teams. His *Success-adjusted Attacking Coefficient* (**11.43**) is **one of the lowest** in this study, and it is substantially lower than **Pochettino**, **Nagelsmann**, **Zidane**, and **Enrique**.
- Moreover, **Mourinho's** objective levels of *football intelligence* are somewhat lower than in previous years, and are now comparable (for both *Strategic Intelligence* and *Tactical Command*) with **Potter**; and **markedly lower** than **Zidane**, **Pochettino**, **Nagelsmann** and **Enrique**.
- **Mourinho's** levels of *Possession* are the **lowest** of any of the head coaches in the study (**50% for home matches, and 49% for away matches**), and his *Shot Conversion Rating* is also **exceptionally low**.
- Overall, **Mourinho's** objective performance levels are lower than most of the head coaches in this study. Whilst he has historical connections to Chelsea, his best performance levels also appear to be increasingly historical, and if Chelsea's objectives involve success at the top of the Premier League and in the Champions League then there seem, objectively, to be a number of better head coach options than **Mourinho**.

9. Zinedine Zidane: Out of work since 2021...?

- An extended period away from a head coach position increases the risk that the head coach will not be able to replicate previous performance levels (and traits) on their next head coach appointment.
- **Zidane** has not held a head coach position since 2021, and this should obviously be taken into account if he is in consideration for a new head coach opportunity. Nevertheless, his absence from football coaching is relatively recent and we have taken account of this absence in calculating his *Normalised Carteret Manager Rating* (**455.00**).

- Even taking account of his absence for nearly two seasons, this *Normalised Carteret Manager Rating* is comparable to **Pochettino (458.70)** and **Conte (461.90)**, and slightly lower than **Tuchel (496.70)**. As mentioned previously, *Normalised Carteret Manager Rating* provides a good indication of extended periods of winning matches with a relative probability of repeating those extended periods over the forthcoming three full seasons.
- Even so - again as mentioned above - a head coach's ability to further develop and improve is dependent on a number of metrics including, pertinently, their *football intelligence* (objectively measured).
- **Zidane** has an **excellent** *Strategic Intelligence Rating (73.68)*, but still ranks **behind Nagelsmann (98.04)**, **Enrique (81.61)** and **Pochettino (75.44)** in his ability to set-up his team for matches to maximise the probability of winning the next match.
- Likewise, **Zidane** has a **superior** *Tactical Command Rating (4.53)*, but still lags **behind Enrique (6.24)** and **Pochettino (5.50)** in his objective ability to transform a match (as it is playing) to an incrementally better outcome.
- **Zidane's** *Attacking Coefficient (25.73)* indicates that he has a **very attacking style of play**, second only to **Enrique (26.87)**; and similarly **Zidane** is very successful in achieving positive match outcomes from this attacking style of play (**19.01**) - second only, once again, to **Enrique (21.80)**.
- **Zidane's** teams play with a fairly high degree of *Possession* at home and away, but the quantitative analysis indicates that he is not especially successful at creating key match events and converting goals from *Possession* alone. His success in matches is derived predominantly from speed of play rather than extended periods of *Possession*.
- One other notable point is that **Zidane** has the **second lowest** *Opposition Shot Conversion Rating (23.03)* - lower the better - which shows a head coach that is very effective at setting-up his team for an optimal combination of defensive success (in preventing goals and opposition xG goal potential) and also the attacking efficacy of their own team.

10. Julian Nagelsmann: Hype, headaches and a patient 'genius'

- There are perhaps more column inches devoted in the media to **Nagelsmann** for the head coach vacancies at Chelsea and Tottenham than any other head coach. He is certainly well hyped, but does the objective analysis support this hype?
- In a single word - yes.
- Not only does he have the **highest** *Strategic Intelligence Rating (98.04)*, it is over **20% higher** than the next best head coach in the list (**Enrique, 81.61**). Moreover, his *Strategic Intelligence* is **285% higher** than **Rodgers**. There are likely to be very few head coaches in world football at present (if any) that are better at setting-up their team to maximise the probability of winning the next match.
- This is complemented by an **excellent** *Tactical Command Rating (4.53)*, which shows that his ability to set-up for matches is supported by a strong aptitude at transforming matches during a match. However, he is not quite as good tactically as **Enrique (6.24)** or **Pochettino (5.50)**.
- **Nagelsmann** has a unique style of play. He has a **very low** *Attacking Coefficient (20.49)* which indicates a defensive style of play, but he does make this work for his teams - he has **one of the highest success rates** from that *Attacking Coefficient (18.93)*.
- This is then combined with the **highest** *Shot Creation Ratio* (by some margin) - **2.13:1** - and a **very good** *Shot Conversion Rating (40.54)*.
- **Nagelsmann** has the **highest** average *Possession* levels (**68% at home, 63% away**), and he is exceptionally good at creating key match events and/or creating goals from these exceptionally high levels of *Possession*.
- This illustrates a very methodical, patient and probing style of play - to create key match events and goal scoring opportunities in a manner that is, in equal measures, unique and effective.

- Headaches? Some of the column inches in the media have focused on **Nagelsmann's** 'interpersonal skills', and a perceived breakdown in relationships with the players and club ownership. This is something that any club recruitment team would need to investigate fully, but the quantitative analysis does not indicate any particular weakness in **Nagelsmann's** performance levels that could exacerbate discontent in the playing squad - as is the case with, say, **Conte** and **Rodgers**.
- It is possible that **Nagelsmann's** unique strategic playing methods and style require a very high degree of focus by the players, which might cause an equally high level of frustration and contention within the team itself if strategic plans are not executed as envisaged by **Nagelsmann**.
- **Nagelsmann's** style of play was also reported by supporters to be too 'laboured and flat', and this can become a challenge if the team is not winning matches. It is also noticeable from the quantitative analysis that **Nagelsmann** has a relatively high (lower the better) *Opposition Shot Conversion Rating*, which indicates that his team's defensive *Possession* style was not impregnable and it can be very frustrating for supporters to witness goals being conceded from 'excessive' *Possession* in defensive zones.
- These couple of quantitative weaknesses are what are keeping **Nagelsmann** from ranking in first place in this study, and if these are remedied then his strengths are at such an exceptional level that he could be projected with potential to be one of the Top 5 head coaches in the world.

11. Luis Enrique: International man of mystery

- **Enrique** has not coached a club football team since 2017. That is an exceptionally long period of time in club football, with a huge number of changes in football style, philosophy and analytics in the intervening years. This is why **Enrique** has a high *Confidence Index Rating* (**4.36**) which indicates that there is a high level of risk in relying on his applicable performance data.
- **Enrique** was exceptional as a head coach at Barcelona. This is reflected in his *Carteret Manager Rating* of **568.80**, which is **[significantly] higher** than any of the other head coaches on the list.
- If **Enrique** had this level of rating, and had been head coach at a club team as recently as 2022, then there would be no contest. However, once his absence from club management has been taken into account, together with the relative weighting of his objective performances as an international head coach during this interregnum, his *Normalised Carteret Manager Rating* falls to **330.10** (which is the **second lowest** of any head coach in this study).
- Even so, **Enrique** has exhibited exceptional levels of transferable skills - that at least make him a serious candidate for consideration.
- He has the **second highest Strategic Intelligence Rating (81.61)** - after **Nagelsmann (98.04)** - and the **highest Tactical Command Rating (6.24)**. Both of these indicate an **extremely high level** of *football intelligence*, that our empirical evidence has shown to be transferable between clubs and over an extended number of years.
- **Enrique** also has the **highest Attacking Coefficient (26.87)** which illustrates the highly offensive style of play, complemented by the **highest success** of any head coach of the list derived from this attacking style of play.
- His *Shot Creation Ratio*, *Shot Conversion Rating* and *Opposition Shot Conversion Rating* are also all in the **highest percentiles**.
- **Enrique's** levels of *Possession* are very high for club football (**67% at home, 64% away**), and comparable with **Nagelsmann**. The difference between **Enrique** and **Nagelsmann** is the style of play. **Enrique** achieves significant success from his team's high *Possession*, but this *Possession* is much more attacking and concentrated in attacking zones - compared to **Nagelsmann**, who's teams have high possession in defensive zones and play through the pitch thirds in a patient and methodical manner.
- This substantial divergence in styles will be a consideration for recruitment teams at, for example, Chelsea and Tottenham - with both head coaches having the potential to have similar levels of success. The pause for thought for **Nagelsmann** is that he has exceptional quantitative metrics, but has not

yet built-up a significant 'body of work' to fully exhibit that potential; whereas **Enrique** has equally exceptional metrics (if not, better) and has a good body of work that is relevant, but achieved over five years ago.

12. Glossary

Carteret Manager Rating (CMR)

This is a unique quantitative measure of overall ability. It is based on the premise that the primary objective of a manager/head coach is to win football matches, and the Carteret Manager Rating (CMR) is an assessment of his success in this regard over the last six seasons. Whilst we can determine a manager's CMR over a longer period (if necessary), we have calculated that the most accurate and predictive indicator of success for a manager is based on his prior six seasons, with an incremental weighting towards the most recent seasons.

The CMR is also weighted for the level of the league in which the manager has operated at any point in time during the last five seasons. We apply a significance metric based on the level of data population for the last five seasons (the lower the figure the better), and which could be impacted, for example, by periods of inactivity within that period. Finally, as a means of comparison, we have also worked on a club specific premise that the club would want their next manager to guide the club to a particular position in the league and other relevant competitions (e.g. Champions League) at the conclusion of Season 2023/24.

Carteret Manager Rating Confidence Index (CMR CI)

The overall purpose of the quantitative analysis in the football sector is to accurately predict the future performance levels of players, managers and teams - in a variety of league, style, player combination and formation scenarios. We have built a series of algorithms that are able to utilise a huge amount of raw data to produce highly accurate predictions - which we constantly measure after every match to ensure the predictive levels (R-squared value) remain high. The line of predictive extrapolation in any data analysis will always be dependent on the quality and quantity of raw data. We are usually very confident with the quality of raw data that we are able to utilise, but sometimes the quantity of the raw data is lower for one manager for a particular period than another manager. We need to recognise that difference in quantity, and the CMR CI is our mechanism for doing so. A CMR CI rating of 1.00 or lower suggests an extremely high level of confidence that the quantity and quality of the raw data is of a sufficiently high level to produce a strong extrapolated line of prediction.

Normalised Carteret Manager Rating

In addition to the Carteret Manager Rating, we have also developed a series of algorithms to take account of the volume, variability and veracity of the raw data for each manager. The Normalised Carteret Manager Rating takes account of the fact, for instance, that one manager might have an exceptional rating and individual metrics but has only managed for a relatively short period and, perhaps, in a single league. In this scenario it would be a relatively high risk to assume that the

manager in question might continue on the same trajectory and at the same levels for, say, the next three seasons. The CMR for a manager with longer and broader experience (across leagues, and particularly in the target league) might be a better predictor of medium-term success, than for a manager with very limited experience or with gaps in his managerial career. The Normalised Carteret Manager Rating takes account of the CMR CI (see above) to rebalance/homogenise the probability of a successful outcome with each manager over the next three seasons.

Strategic Intelligence Rating

This measures the manager's ability to prepare and set his team, and analyse the opposition, to maximise the chances of the team winning the next match. The higher the figure, the better. We consider this to be a very important metric because a manager who is able to achieve a high probability of a successful match outcome through a combination of understanding the objective performance abilities and form of his/her [available] players, and their players' contributions to successful outcomes from pitch positions and formations, increases the probability of achieving a higher league position at the conclusion of the season. This metric also includes manager ability to adjust for the same objective indicators in the opposition players (in various formations and combinations).

Tactical Command Rating

This is a measure of the manager's ability to transform a match (during the match), and, in particular, to develop a winning position for the team from various match scenarios. The Key Match Events (KMEs) are those events within a match that 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. This part of the analysis assesses how the probability of each and every specific KME is altered within each and every match to transform a leading, equal, or deficient scoreline into a win (or, as a secondary measure, a draw). A match loss will lead to a weighted negative assessment, based on the preceding scoreline position within every match. The Tactical Command Rating is a 'per match' rating, the higher the figure the better.

Attacking Coefficient

Success-adjusted Attacking Coefficient

The attacking coefficient measures the manager's propensity to play an attacking style of football - the higher the figure, the more attack minded is the manager. We have also measured the relative impact of the manager's attacking coefficient on the success of the team winning matches - again, the higher the figure the better. Success is not wholly related to a manager's attacking coefficient, but an attacking style of play, married to the team winning football matches, might be a consideration for the Club.

Team Shot Conversion Rating
Opposition Shot Conversion Rating

This is an extract of one of the KMEs. Based on the premise that the primary objective of the Club is to win matches, in order to achieve the specific target of guiding the Club to a particular position in the league and other relevant competitions at the conclusion of Season 2022/23, this is a key metric that highlights a team's ability to increase the probability of winning matches. There are a whole series of impact metrics that measure and rate the contribution to KMEs, but this is a useful metric to extract both in terms of its overall objective influence, and as an illustration of attacking efficiency. We have also included the requisite metric for the opposition teams from each of the matches, to give a relative sense of attacking and defensive efficiency. It is preferable for the Team Shot Conversion Rating to exceed the Opposition Shot Conversion Rating.

Shot Creation Ratio

It is obvious that a shot on goal significantly increases the team's opportunity of scoring a goal, which in turn significantly increases the team's chances of winning the match. It is a statistically significant exercise to assess the comparative ratio of shots on target, between the team and the opposing team, as an indicator of propensity for winning matches. In the ratio above, the manager's team is listed first. It is sometimes preferable that his figure should exceed the opponent's figure, but the key factor, of course, is the conversion of a shot on goal to an actual goal (as per the Shot Conversion Rating above).

Possession - Goal Conversion Rating (Home)**Possession - KME Creation Rating (Home)****Possession - Goal Conversion Rating (Away)****Possession - KME Creation Rating (Away)**

Possession is a metric that is often referenced and debated - and misapplied. Possession is a good base for KMEs - if the team has possession at a specific point in time, then it is highly unlikely that a goal will be conceded at that point in time (unless it is an own goal) - and equally the team is only likely to score a goal if it has possession (again, a specific type of own goal being an exception). However, football provides an immensely fluid data population with a myriad of time points, and so it is vital to identify the key points (in relation to possession) that have the highest relative impact on winning matches. The Possession Goal Conversion Rating assesses the positive impact of possession at key points within each and every match, that lead to a goal being scored - a high figure indicates a more effective conversion of possession by the team, rather than possession for the sake of possession. Likewise a high Possession KME Creation Rating indicates a positive utilisation of possession to improve the quantity of KMEs that lead, or could lead, to match winning scenarios.