# 2015-16 Leicester City Complete Analysis

Fadi Haddad

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# Introduction

At the time of writing, it has been about a year since I have set out on my journey within sports analytics. My inspiration for this project was to learn and apply the skills that I would need to provide valuable insights to football clubs and enthusiasts around the world. It is my hope to look back at this project a few years from now and realize how poor it is. Not because the work is poor but because I will continue to make improvements and earn the ability to develop even better work.

I chose to analyze Leicester City during the 2015-16 EPL Season as it is arguably the biggest underdog triumph in modern sports. I remember learning of the news that they had clinched the title in 2016. I was in Grade 11 of High School at the time and I remember seeing all of the reactions surrounding the team both through social media and public conversations. As a team with 5000-1 odds to win the Premier League, they had done the impossible. They won the elusive title in just their second consecutive year in the English top flight and knocked off all of their counterparts who had the luxury of fielding world class players and much higher budgets.

This project was my opportunity to evaluate for myself the factors that led to their success using analytics. Were Mahrez and Kanté truly as gamebreaking as they were perceived that season? Was Jamie Vardy the best Striker in the Premier League? Were Leicester City counterattack merchants who patiently sat in a low block? Was their triumph mostly due to good fortune? These were the questions that I aimed to answer using the numbers. I must confess that I did not watch any of their matches that season (criminal I know). In a perfect world, you want the analytics and the eye test to both be in alignment to make the most informed decisions possible. In this case, I will do my best to craft my story of their season strictly using the numbers.

For this project, I used the 2015-16 Season data provided by StatsBomb. This data is free and can be used by the general public. It is

important to note that this data and my subsequent analysis only includes the English Premier League (EPL). It does not include other competitions such as the FA Cup or UEFA Champions League.

I want to end this section by acknowledging and thanking everyone who has provided me feedback on this project and those who have helped me along the way. I hope that this project can be an entertaining read while also providing useful insights.

# 10 Game Rolling Averages

   The cliché saying in the sports world is that it is a results based business. Staying true to this saying, this is where my evaluation of 2015-16 Leicester City begins. Figure 1 displays the points earned by the top 6 EPL teams using a 10 game rolling average. It can be seen that Leicester City were averaging the second lowest point total among the top 6 teams for the first 10 matches but surged to peaks of 2.6 points per game during Matchweek 17 and 2.64 points per game during Matchweek 36. That season, the club's average points per game never fell lower than 1.58 (Matchweek 11). Not only did Leicester City achieve the highest peaks, they were also a very consistent club without much variance in their results.

Figure 1:
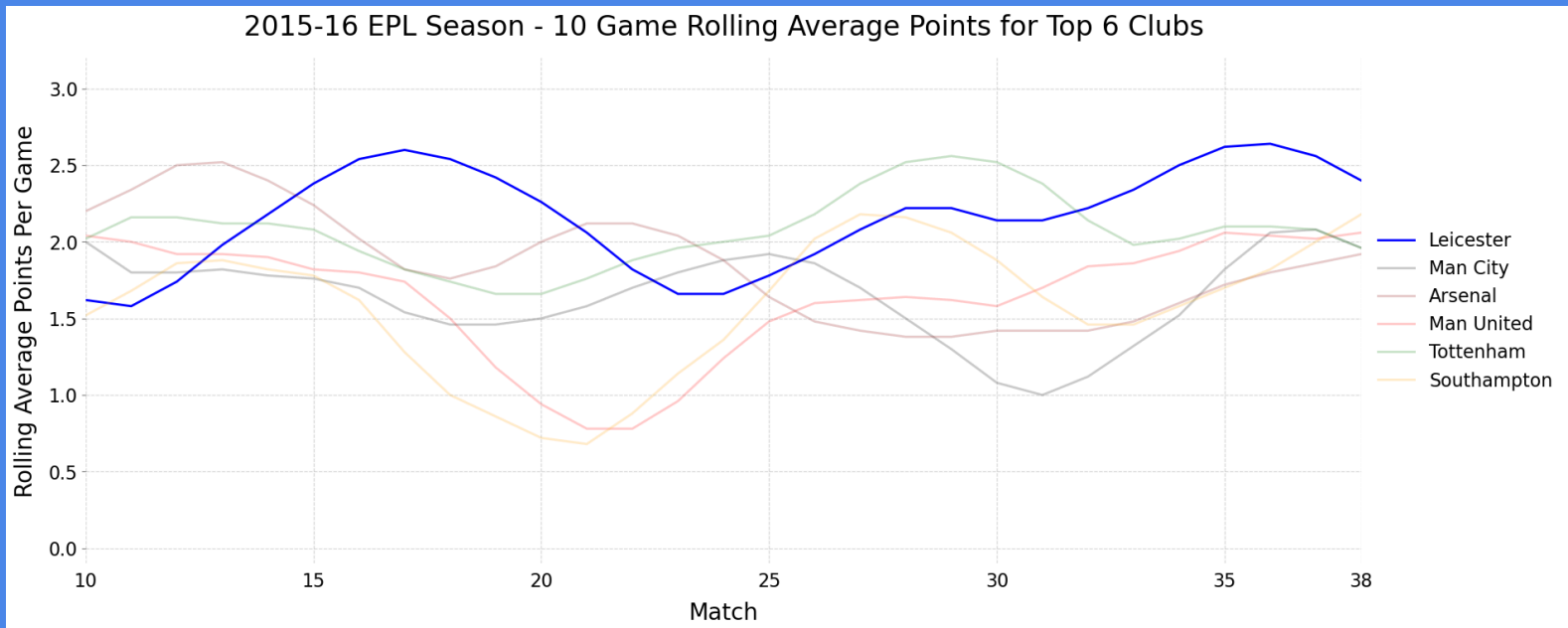
While results are how success is measured, they tell us nothing about how a team actually performs. This is especially the case in a sport like football where there are countless variables that can significantly affect the outcome of matches. The net xG rolling average aids us in measuring a team's performance during individual matches by summing the xG of their shots and subtracting it by the xG of the opponent's shots. The theory is that if your team has a higher xG than your opponent, your team is creating more dangerous opportunities and should both score more goals and win more matches over the long run. At their peaks, Manchester City and Arsenal dominated teams with an average net xG above 1. While Leicester City never reached those levels of dominance, they consistently created more dangerous chances than their opponents with very little variance in performance. They were consistently involved in patterns of play where they were outplaying their opponents with the team never dropping below 0.21 net xG.

Figure 2:



2015-16 EPL Season - 10 Game Rolling Average Net xG for Top 6 Clubs
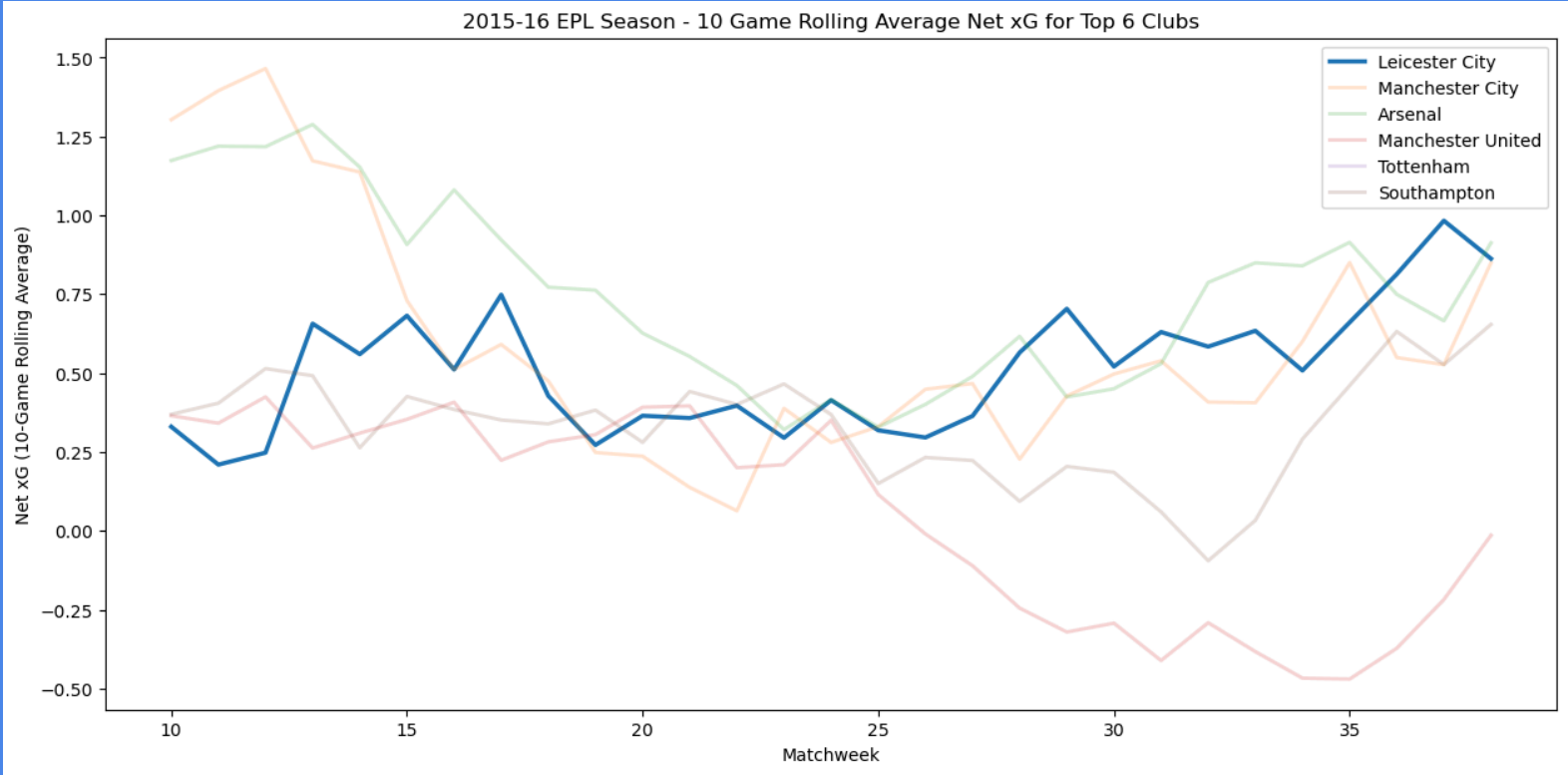
# Passing Networks & Formation

      Diving a little deeper, I wanted to identify if Leicester City played a certain style of football or whether they had certain preferences within their build up play. This was done by creating passing networks for all 38 Premier League matches they played that season. Larger circles represent players who were involved in the most passes and ball receipts while thicker lines between the circles indicate passing networks that were used more frequently. A clear observation is that Leicester City mostly played and received passes within the middle of the pitch. This naturally makes sense since the midfield area is usually the area where most passes are completed. What is more interesting in my opinion is that most of Leicester City's players are clustered together. This is shown within the plots as most of the circles overlap with each other. Based on these passing networks, it can be speculated that Leicester City were focused on packing the midfield area, winning the ball and attempting to find line breaking passes to their forwards.

Leicester City Passing Networks
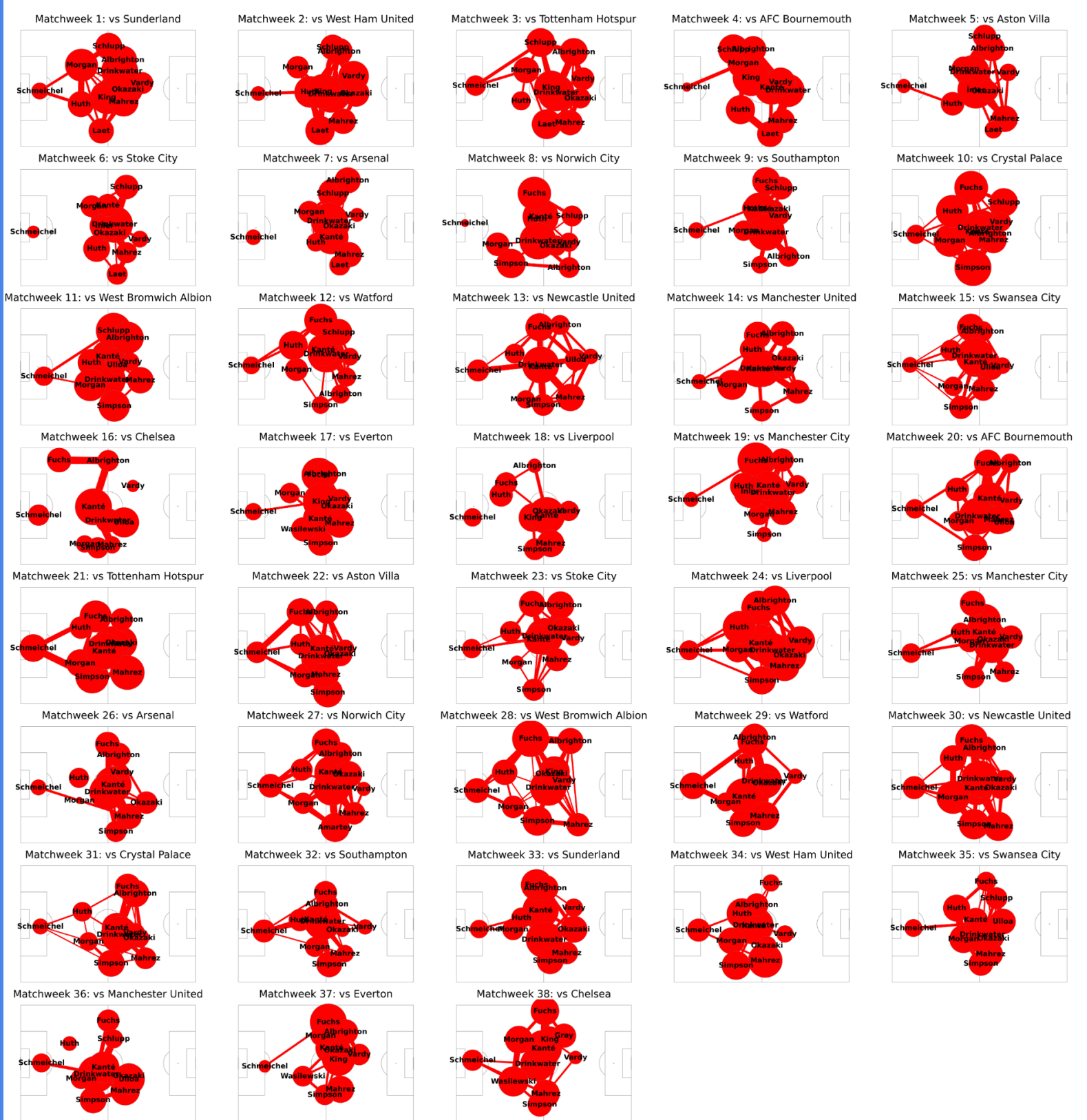
Based on these passing networks I plotted the position of each player using k-means clustering. I set the n=11 since there are 11 players on the pitch and used the average location for each cluster. Figure 4 displays the results of the clustering. From these clusters I was able to plot the Starting XI used most frequently by Leicester City during the 2015-16 EPL season. This is displayed in Figure 5.
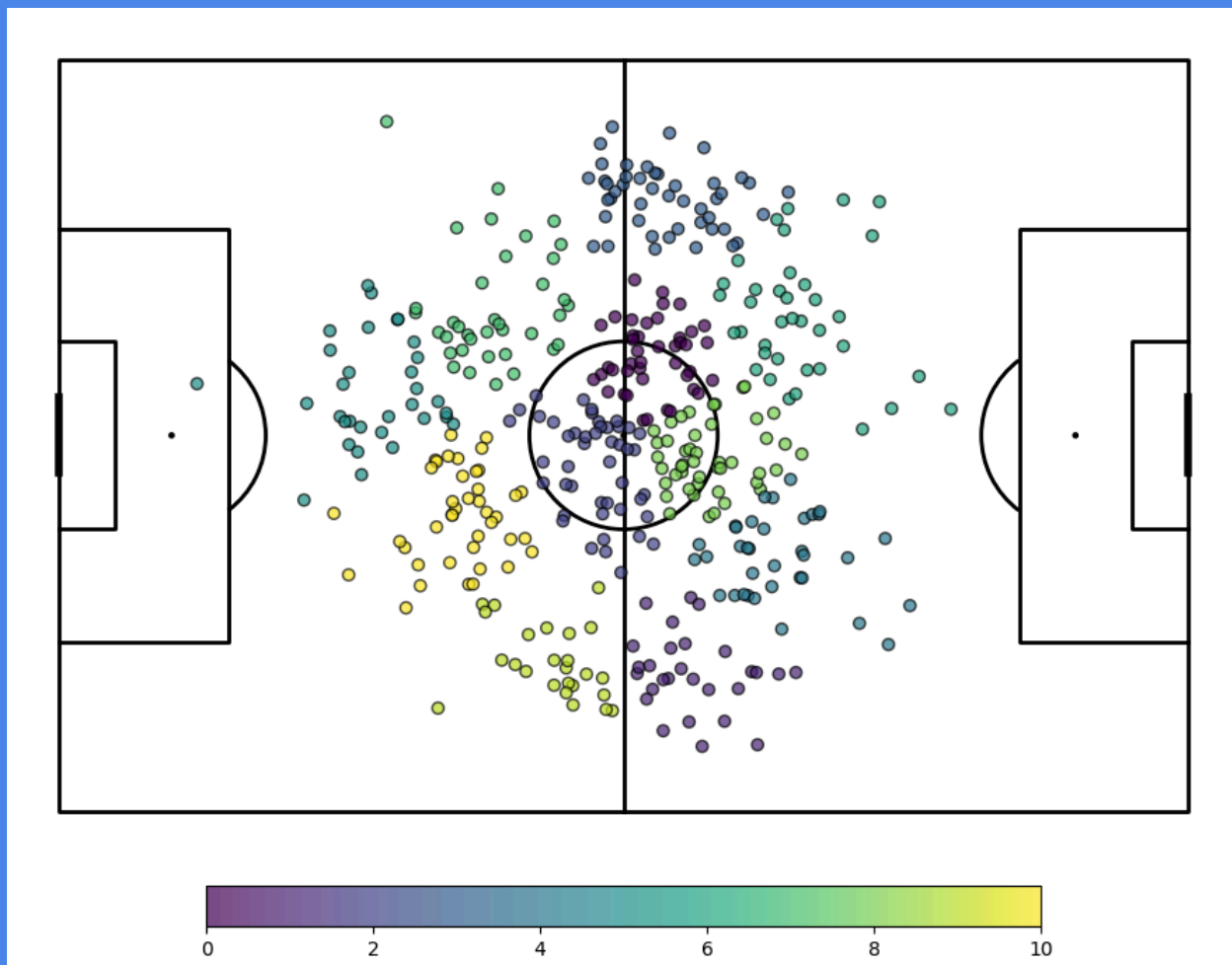
Figure 4:

Figure 5:



2015-16 Leicester City Tactical Formation
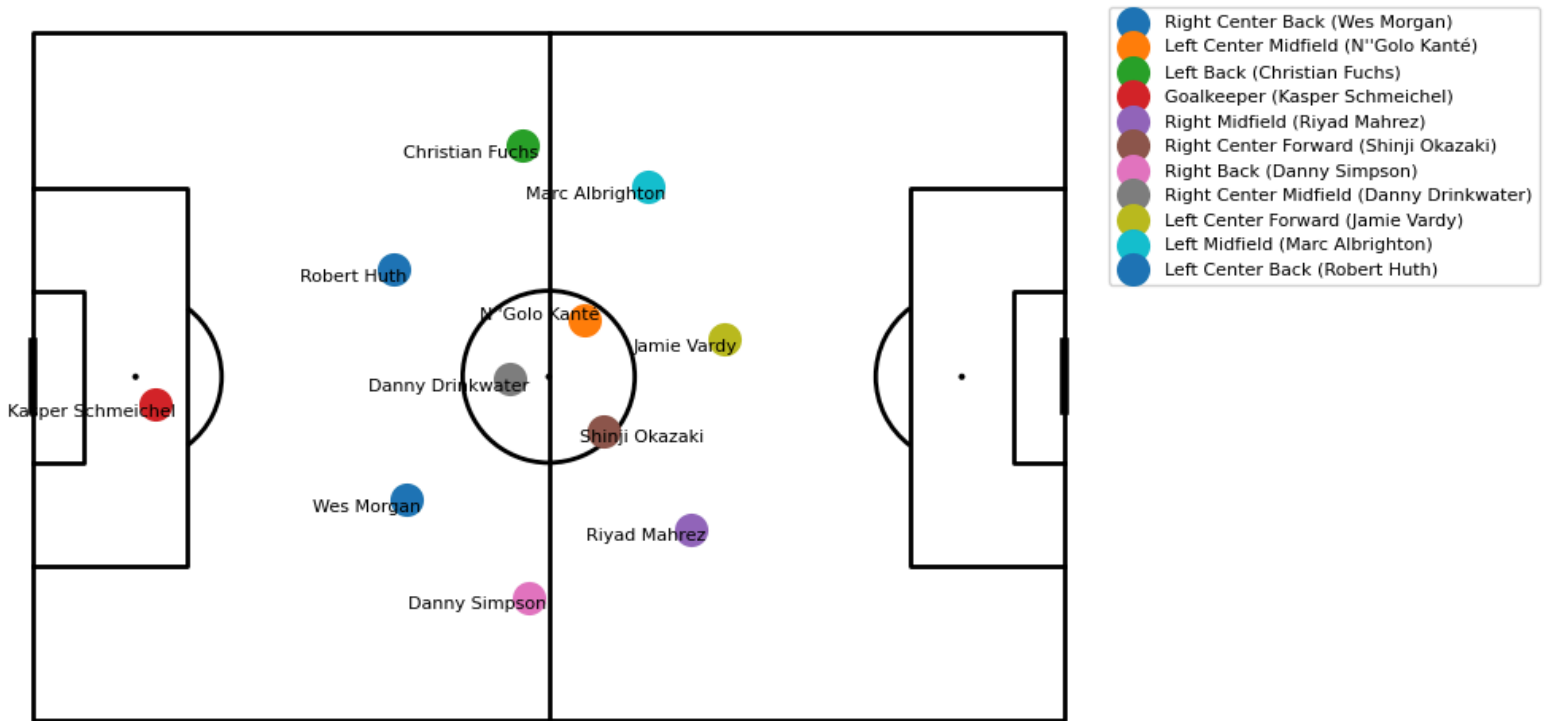
That season, Leicester City relied heavily on the 4-4-2 formation and frequently maintained the same group of players within their Starting XI. As a team in only their second year in the EPL post promotion, this was a smart strategy to employ. Historically, roster depth takes multiple transfer windows to strengthen assuming those transfer windows are successful. Naturally, newly promoted teams have weaker roster depth since they have not had the necessary transfer windows or budgets to compete with established Premier League teams. While Leicester City were able to rely on their core group of players, many teams are unable to do so due to injuries or player demands. In this aspect, Leicester City were very fortunate to avoid any serious injuries to their key players. Though Claudio Ranieri and his coaching staff must be commended for establishing successful team selections.

# Total Minutes Played

Leicester City had 10 players who logged over 2500 minutes and 3 players who ranked in the Top 25 for minutes played (excluding goalkeepers). I believe this prolonged amount of time on the pitch relative to other teams developed a stronger sense of cohesiveness and chemistry within the first team, contributing greatly to their success.
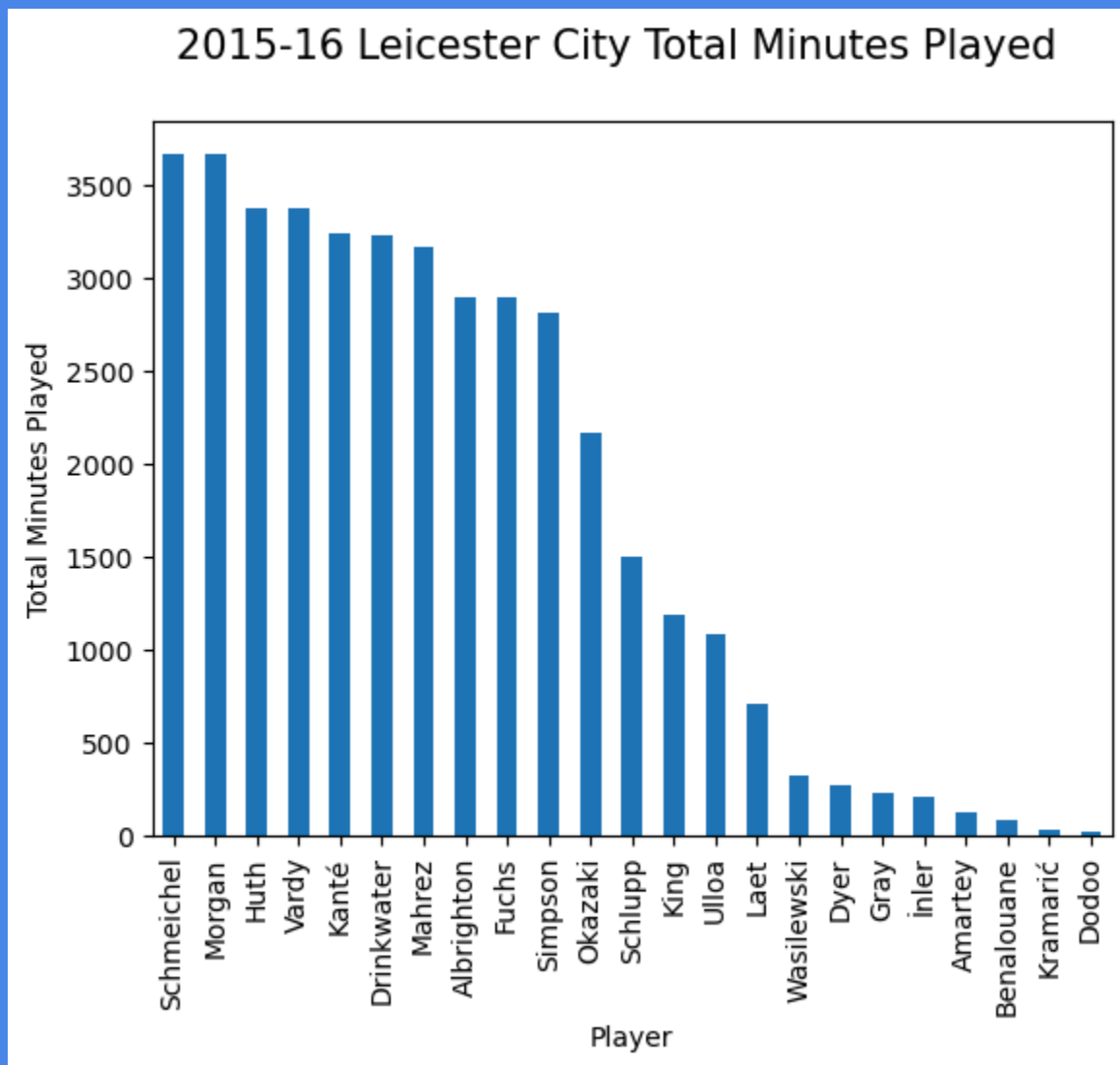
Figure 6:



2015-16 Leicester City Total Minutes Played

Top 25 Players by Total Minutes Played (excluding Goalkeepers)
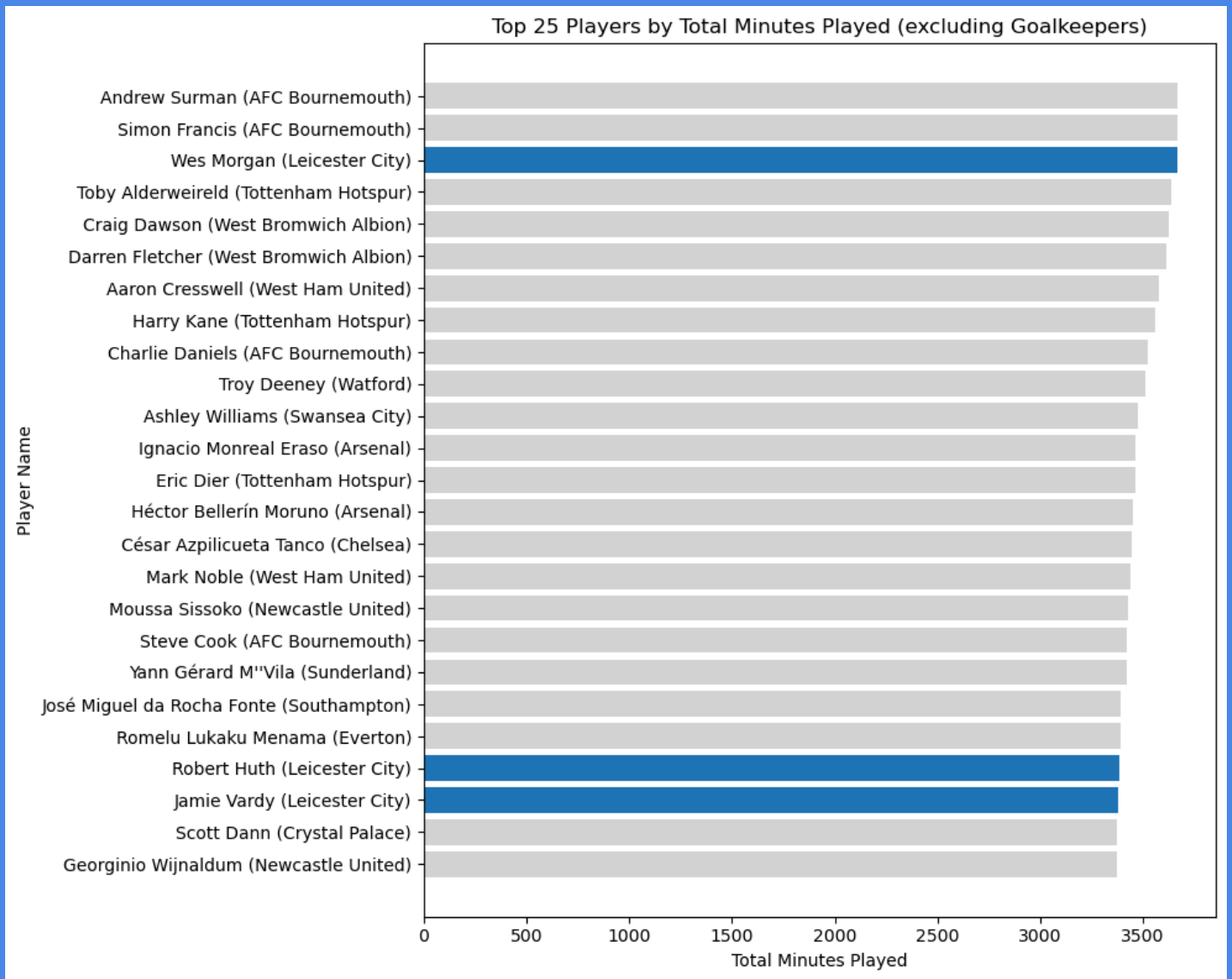
# Basic & Underlying Stats

Leicester's historic season ended with them finishing with 81 points, 10 more than second place Arsenal. They also scored the third most goals in the Premier League and had the 5th highest net xG value. According to xG they were generating the most dangerous scoring chances in the league with 66 goals expected.

Amazingly, Leicester City really outperformed their xGA metric, conceding 10 fewer goals than expected. This statistic points to the fact that their defense was operating at a level well above their baseline and were due for a regression. If instead, the team conceded 46 goals which was their xGA, Leicester City would not have been crowned champions and you would not be reading this analysis. Alas, with every underdog story, lots of things have to go a team's way. It is all a part of the magic of sports.

A possible reason for this disparity is that Leicester City were adept at blocking shots, especially those with a high xG value. It is also possible that Leicester City's opponents were under pressure at the time of the shots which greatly reduced the likelihood of goals.

Table 1:

| Team | W | D | L | PTS | G | GA | GD | xG | xGA | net_xG |
|---|---|---|---|---|---|---|---|---|---|---|
| Leicester City | 23 | 12 | 3 | 81 | 67 | 36 | 31 | 66.282171 | 46.133551 | 20.148620 |
| Arsenal | 20 | 11 | 7 | 71 | 62 | 33 | 29 | 65.136126 | 33.574686 | 31.561440 |
| Tottenham Hotspur | 19 | 13 | 6 | 70 | 68 | 32 | 36 | 62.356203 | 35.561220 | 26.794983 |
| Manchester City | 19 | 9 | 10 | 66 | 71 | 39 | 32 | 64.555055 | 39.058934 | 25.496121 |
| Manchester United | 19 | 9 | 10 | 66 | 46 | 33 | 13 | 42.198589 | 38.518749 | 3.679839 |
| Southampton | 18 | 9 | 11 | 63 | 57 | 41 | 16 | 54.223258 | 39.750323 | 14.472935 |
| West Ham United | 16 | 14 | 8 | 62 | 64 | 49 | 15 | 54.526547 | 54.267445 | 0.259102 |
| Liverpool | 16 | 12 | 10 | 60 | 62 | 49 | 13 | 58.373657 | 38.027574 | 20.346083 |
| Stoke City | 14 | 9 | 15 | 51 | 40 | 55 | -15 | 40.368844 | 55.236536 | -14.867692 |
| Chelsea | 12 | 14 | 12 | 50 | 55 | 51 | 4 | 53.579995 | 47.968944 | 5.611052 |
| Swansea City | 12 | 11 | 15 | 47 | 41 | 47 | -6 | 42.145183 | 50.738796 | -8.593613 |
| Everton | 11 | 14 | 13 | 47 | 56 | 54 | 2 | 50.614745 | 54.408405 | -3.793660 |
| Watford | 12 | 9 | 17 | 45 | 36 | 48 | -12 | 44.082146 | 53.411908 | -9.329762 |
| West Bromwich Albion | 10 | 13 | 15 | 43 | 32 | 45 | -13 | 38.626782 | 48.698063 | -10.071281 |
| AFC Bournemouth | 11 | 9 | 18 | 42 | 43 | 67 | -24 | 40.351590 | 46.703807 | -6.352217 |
| Crystal Palace | 11 | 9 | 18 | 42 | 38 | 47 | -9 | 42.383496 | 52.801023 | -10.417527 |
| Sunderland | 9 | 12 | 17 | 39 | 44 | 61 | -17 | 42.487582 | 61.214140 | -18.726558 |
| Newcastle United | 9 | 10 | 19 | 37 | 43 | 63 | -20 | 40.665337 | 56.305968 | -15.640631 |
| Norwich City | 9 | 7 | 22 | 34 | 38 | 66 | -28 | 38.891327 | 59.405513 | -20.514186 |
| Aston Villa | 3 | 8 | 27 | 17 | 25 | 72 | -47 | 29.581017 | 59.644067 | -30.063051 |

Of course, I was not satisfied with a basic team table, so I created a table that tracked metrics when Leicester City had possession of the ball. According to the numbers, Leicester City were near the bottom of the league in ball possession, passes completed, and pass %. The team ranked in the middle of the pack in successful dribbles, shots, and dribble %. The shot % statistic is where the club shined the brightest. They ranked first in the league in this metric by more than one percentage point. This means that the shots they took resulted in goals more often than any other

team in the league that season. The team's performance in all these categories reflect the profile of a team that plays a very direct style of football. According to the numbers, they appear to be a team that looks to attack the opposing net quickly while being elite at finishing their chances when they're created.

Table 2:

| Team | Possession % | Passes Completed | Successful Dribbles | Shots | Goals | Pass % | Dribble % | Shot % |
|---|---|---|---|---|---|---|---|---|
| AFC Bournemouth | 52.20 | 15163 | 414 | 478 | 43 | 78.14 | 55.57 | 9.00 |
| Arsenal | 55.77 | 18758 | 500 | 583 | 62 | 82.60 | 61.96 | 10.63 |
| Aston Villa | 45.75 | 13015 | 453 | 392 | 25 | 75.81 | 58.60 | 6.38 |
| Chelsea | 53.94 | 17277 | 451 | 535 | 55 | 81.21 | 59.42 | 10.28 |
| Crystal Palace | 48.78 | 11395 | 434 | 477 | 38 | 72.08 | 58.89 | 7.97 |
| Everton | 52.11 | 15843 | 404 | 498 | 56 | 79.74 | 57.22 | 11.24 |
| Leicester City | 44.90 | 10401 | 429 | 525 | 67 | 68.91 | 59.17 | 12.76 |
| Liverpool | 55.95 | 16991 | 424 | 635 | 62 | 79.16 | 58.64 | 9.76 |
| Manchester City | 54.99 | 18168 | 460 | 614 | 71 | 81.32 | 63.62 | 11.56 |
| Manchester United | 55.93 | 17628 | 372 | 431 | 46 | 80.53 | 56.62 | 10.67 |
| Newcastle United | 45.47 | 12660 | 466 | 404 | 43 | 75.36 | 59.90 | 10.64 |
| Norwich City | 47.07 | 11912 | 347 | 424 | 38 | 71.53 | 59.52 | 8.96 |
| Southampton | 50.32 | 13530 | 322 | 527 | 57 | 75.19 | 59.96 | 10.82 |
| Stoke City | 48.53 | 13778 | 413 | 425 | 40 | 77.07 | 56.50 | 9.41 |
| Sunderland | 43.37 | 10015 | 314 | 451 | 44 | 68.87 | 57.83 | 9.76 |
| Swansea City | 50.99 | 15867 | 362 | 448 | 41 | 79.32 | 57.28 | 9.15 |
| Tottenham Hotspur | 54.70 | 16226 | 403 | 656 | 68 | 78.68 | 54.61 | 10.37 |
| Watford | 44.64 | 11598 | 347 | 450 | 36 | 70.88 | 60.24 | 8.00 |
| West Bromwich Albion | 44.20 | 9489 | 316 | 396 | 32 | 67.92 | 58.63 | 8.08 |
| West Ham United | 50.33 | 12665 | 419 | 559 | 64 | 75.51 | 59.10 | 11.45 |

# Average Number of Passes Before Shots & Goals

This notion is further reinforced when evaluating the pass to shot correlation matrix shown in Figure 8. The blue dots represent Leicester City and each dot represents a match they played. Most of the blue dots are clustered in the middle left area of the plot which shows that Leicester City did not pass the ball as much as the other teams in the EPL that season while largely being average in the number of shots taken.

This is further reflected in the average number of passes before a shot. Leicester City ranks dead last in this statistic which starkly contrasts the teams who finished in the top half of the table that season. Similarly, they ranked in the bottom 5 teams for average number of passes before goals.
 The fact that they were able to play this style of football and be as successful as they were is a true testament to the buy-in of the players, manager Claudio Ranieri, and the supporting coaching staff who developed and implemented this style of play.
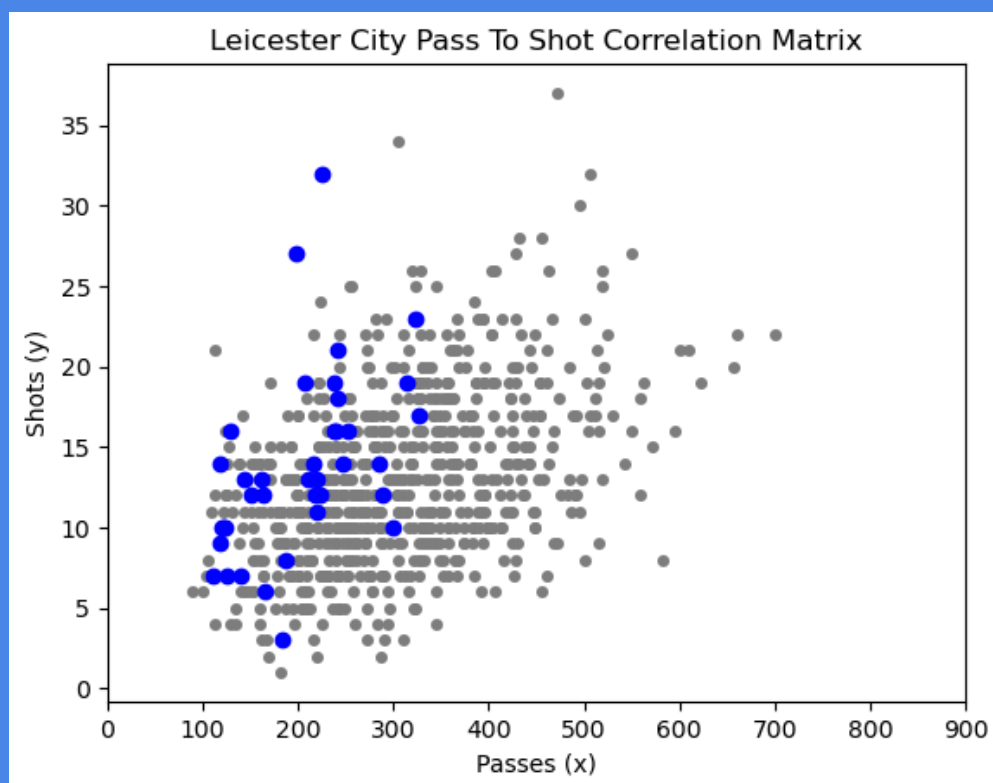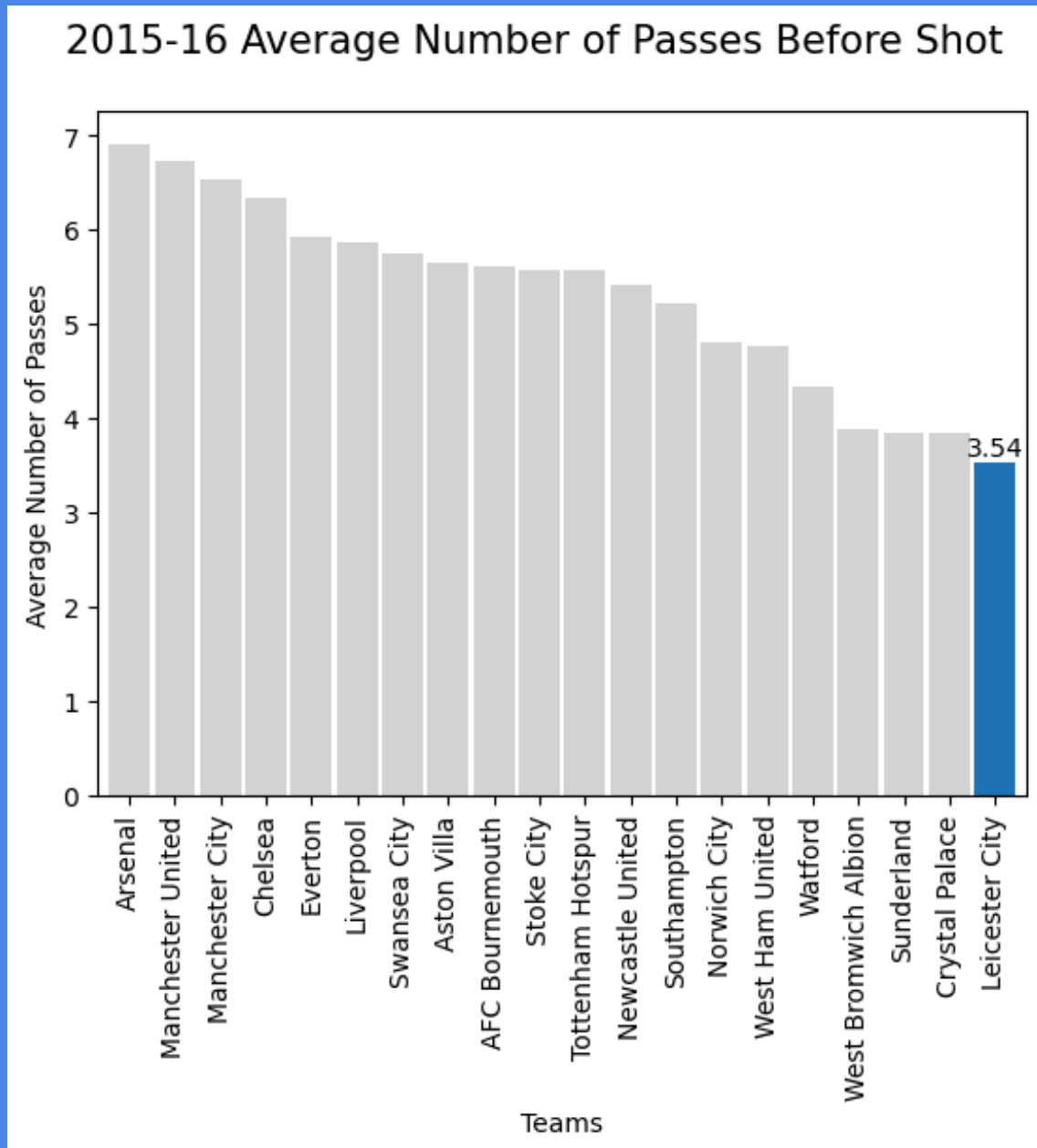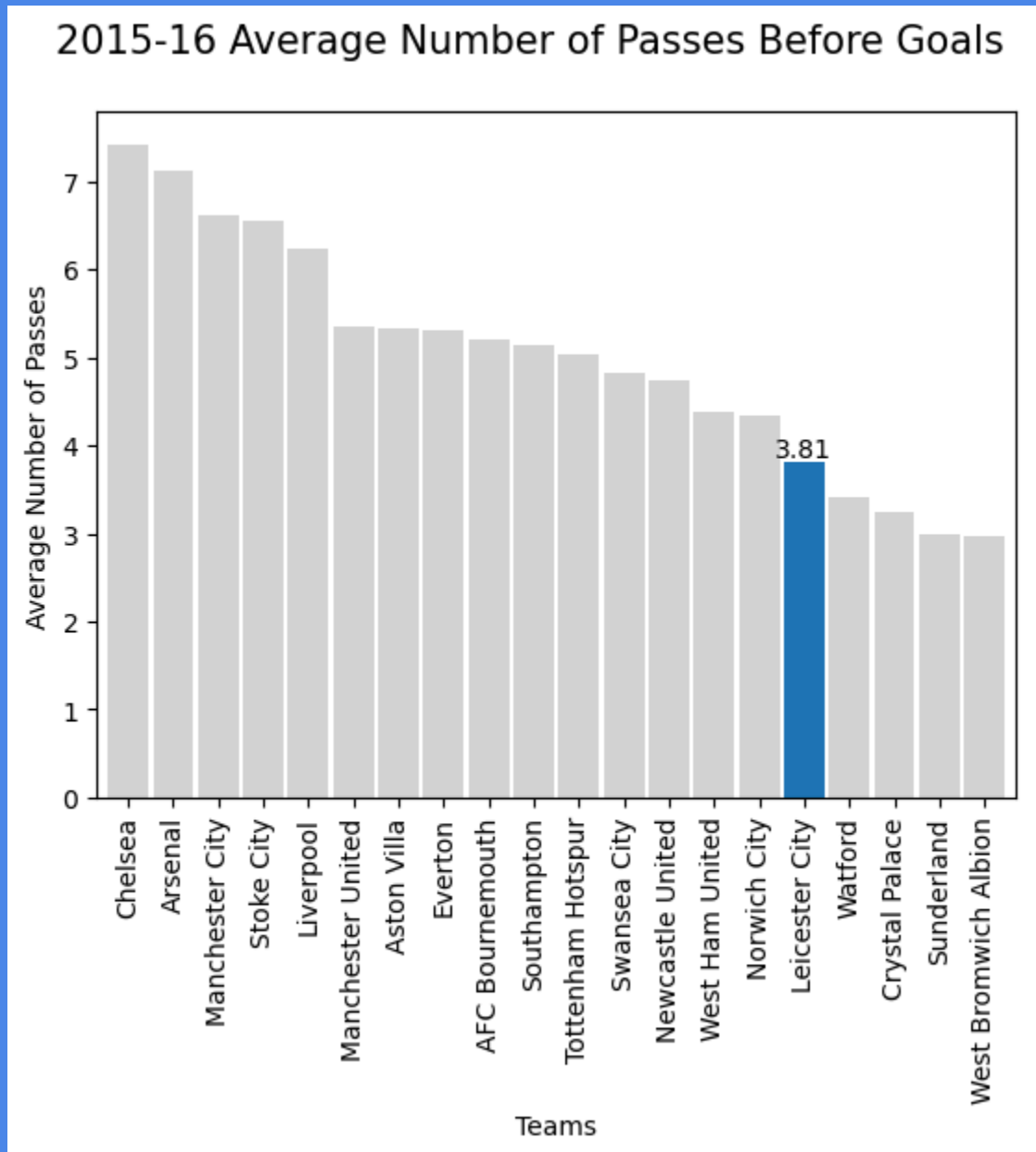
Figure 8:



Leicester City Pass To Shot Correlation Matrix

2015-16 Average Number of Passes Before Shot

2015-16 Average Number of Passes Before Goals

# Progressive Actions

       In football, the teams that win games more often than not work the ball up the field into dangerous areas consistently. Not only does this create opportunities for them to score but it also drastically decreases the opponent's probability of scoring since they then have to work the ball up the field from a further distance. By evaluating a team's progressive actions, we can have a better idea of a team's ability to work the ball up the field. A progressive action is a pass or carry where the team advances the ball at least 25% closer to the opponent's goal from the attacking 60% of the field. Leicester City finished in the middle of the pack for progressive passes, progressive carries, and progressive actions (progressive passes + progressive carries). Thus, we can say that Leicester City were not a team that worked the ball up the field with great volume. While this is true, they are also the team with the lowest number of passes before shots on average as seen in the prior section. Therefore, we can expect these results to be in line according to their playstyle.  Riyad Mahrez and Jeffrey Schlupp were two players who stood out amongst the Leicester City players for progressive actions, notably for their ability to progress the ball up the pitch by carrying it.

       On the other side of the ball, Leicester City were around league average for progressive actions against. This could mean that Leicester City preferred to sit deeper in their defending third of the pitch, allowing their opponents to progress the ball up to a certain area before pressing to try and win it back.
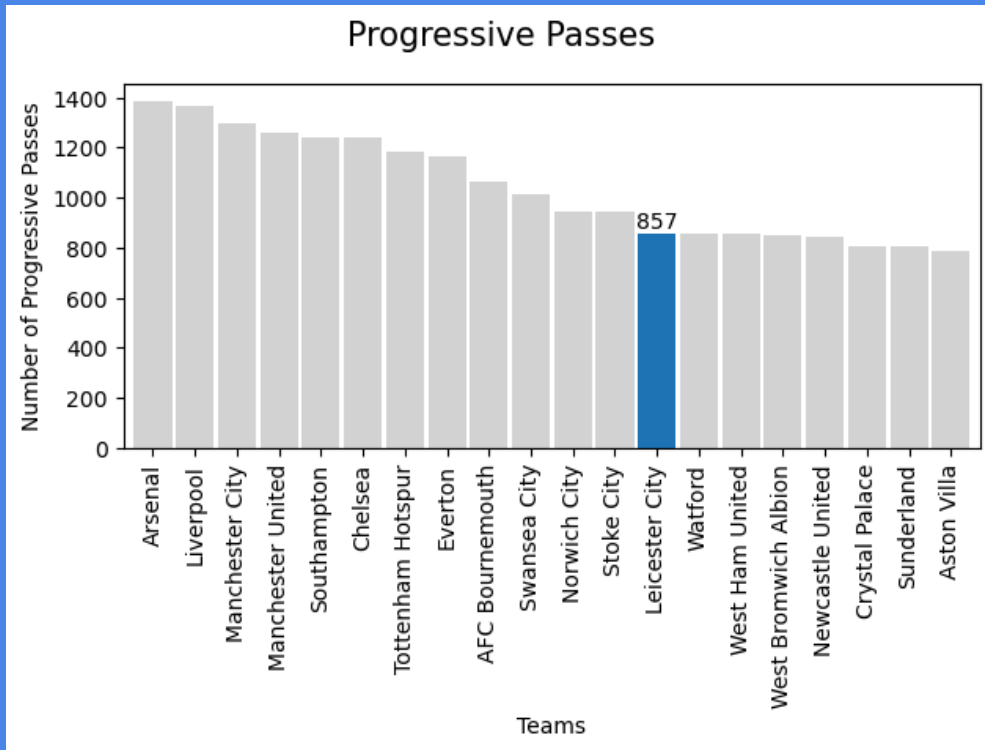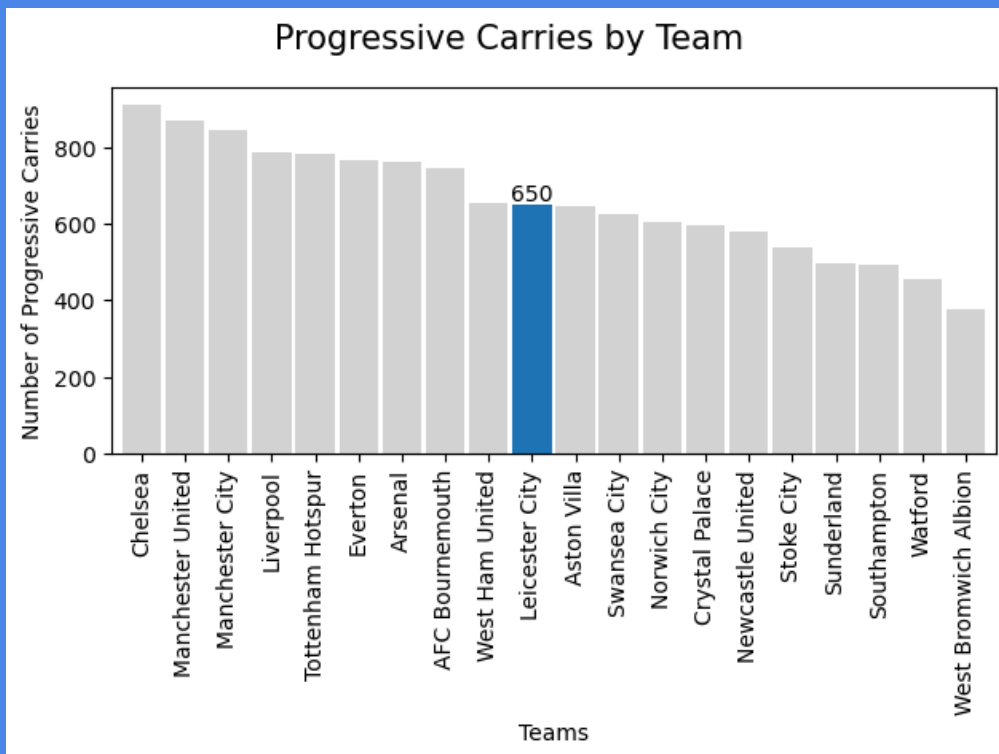
Figure 11:



Figure 12:

Figure 13:



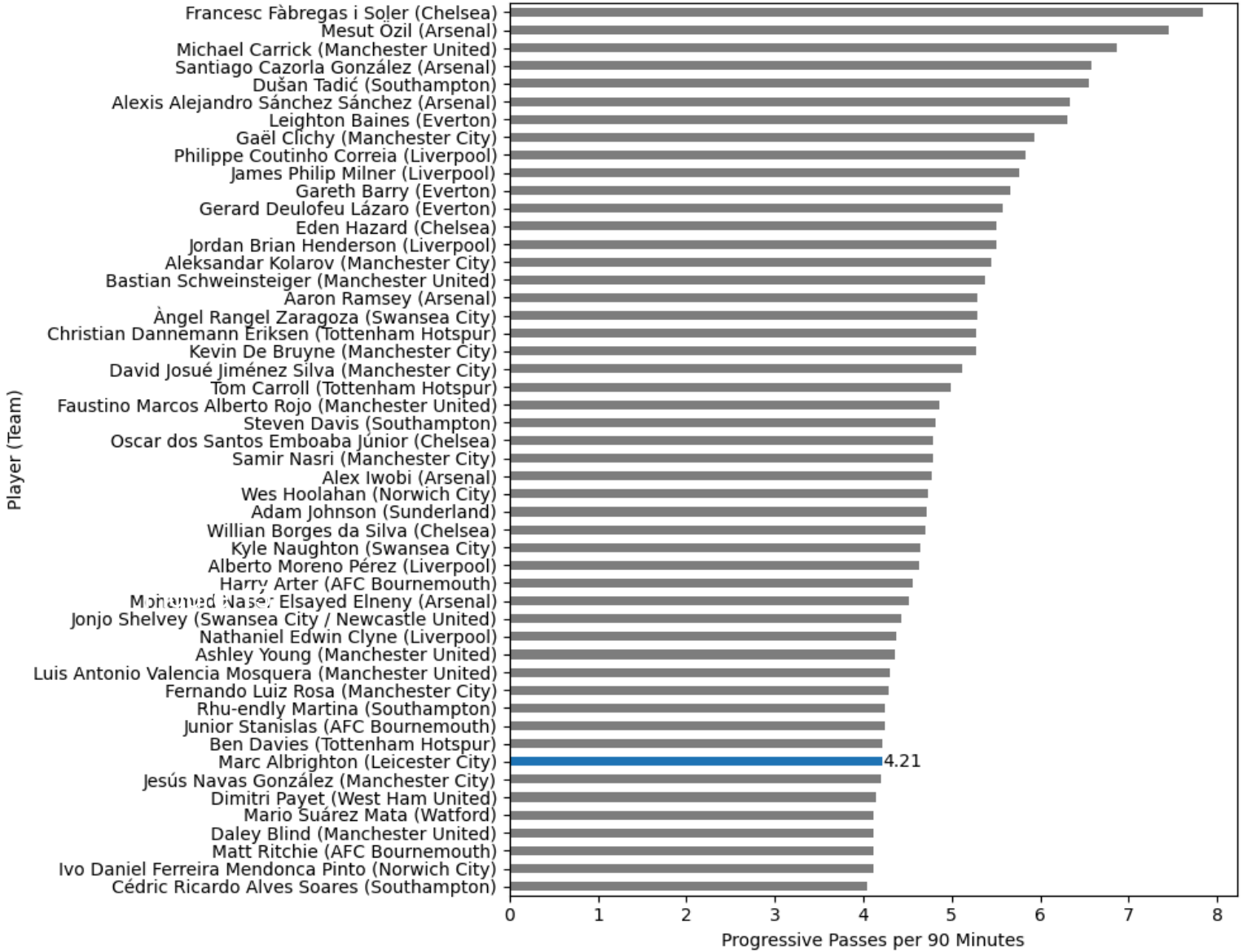Top 50 Players by Progressive Passes per 90 Minutes (min. 500 minutes played)

Figure 14:



Top 50 Players by Progressive Carries per 90 Minutes (min. 500 minutes played)

Figure 15:



Top 50 Players by Progressive Actions per 90 Minutes (min. 500 minutes played)

Figure 16:



Progressive Actions Against
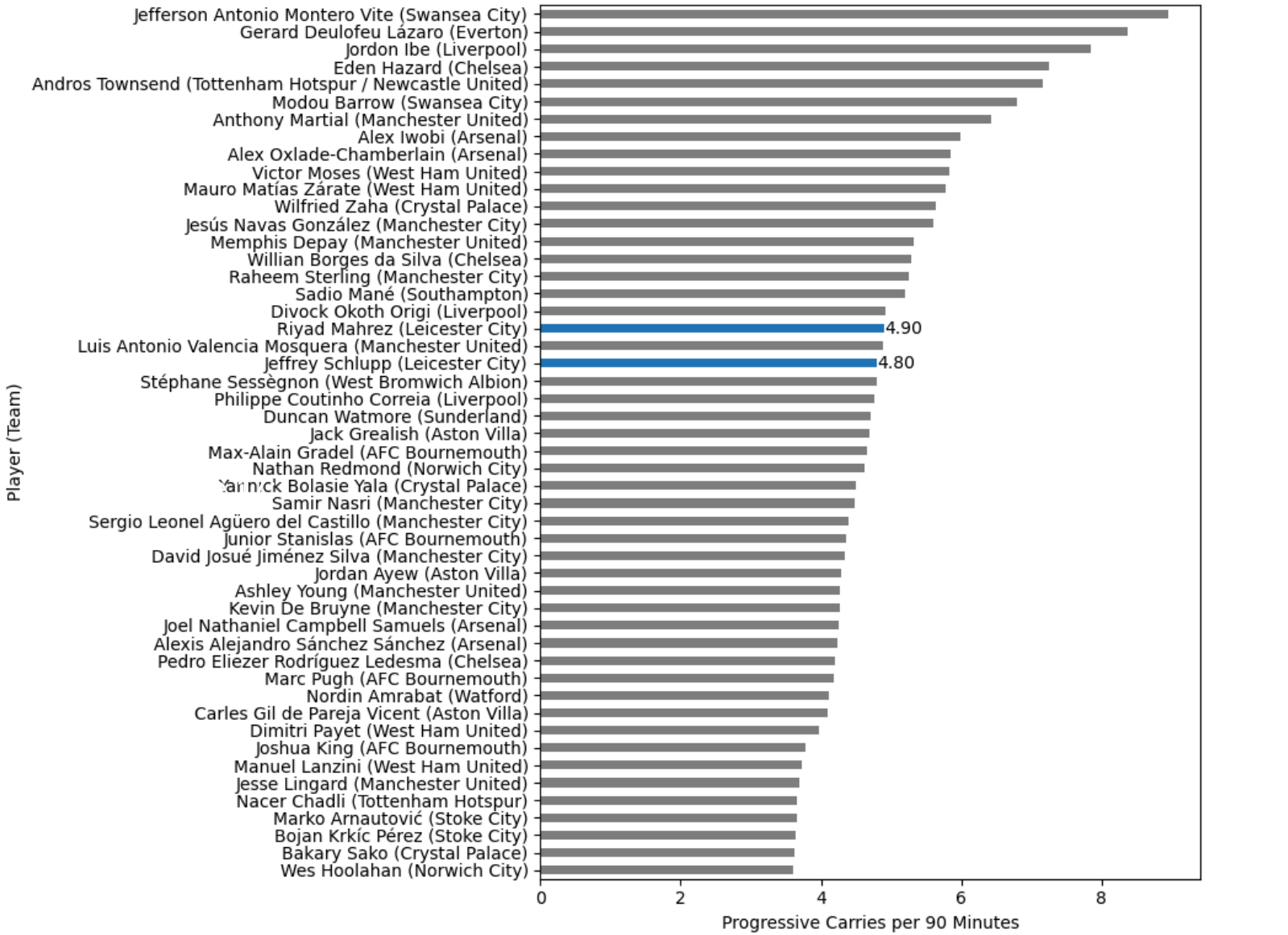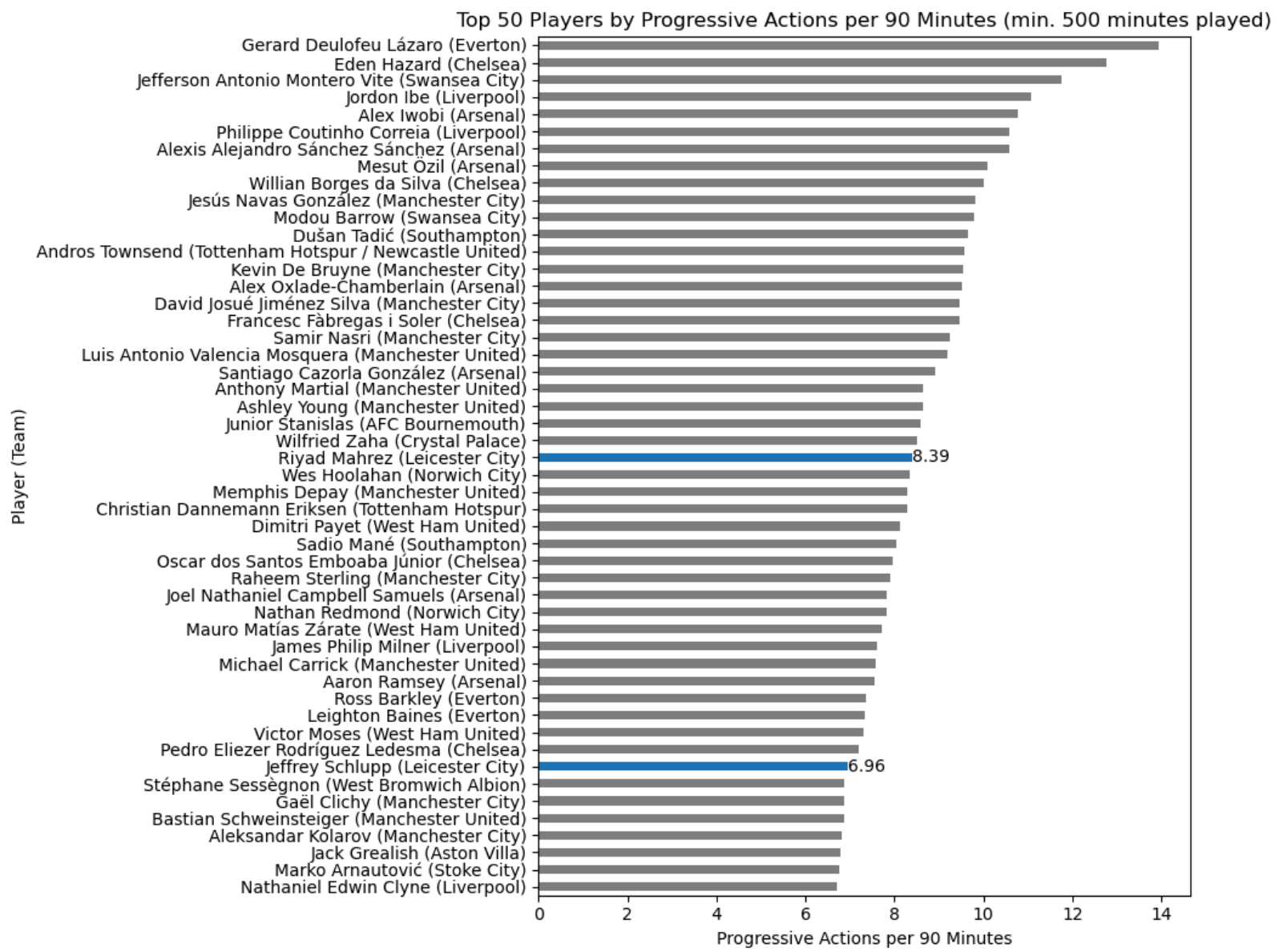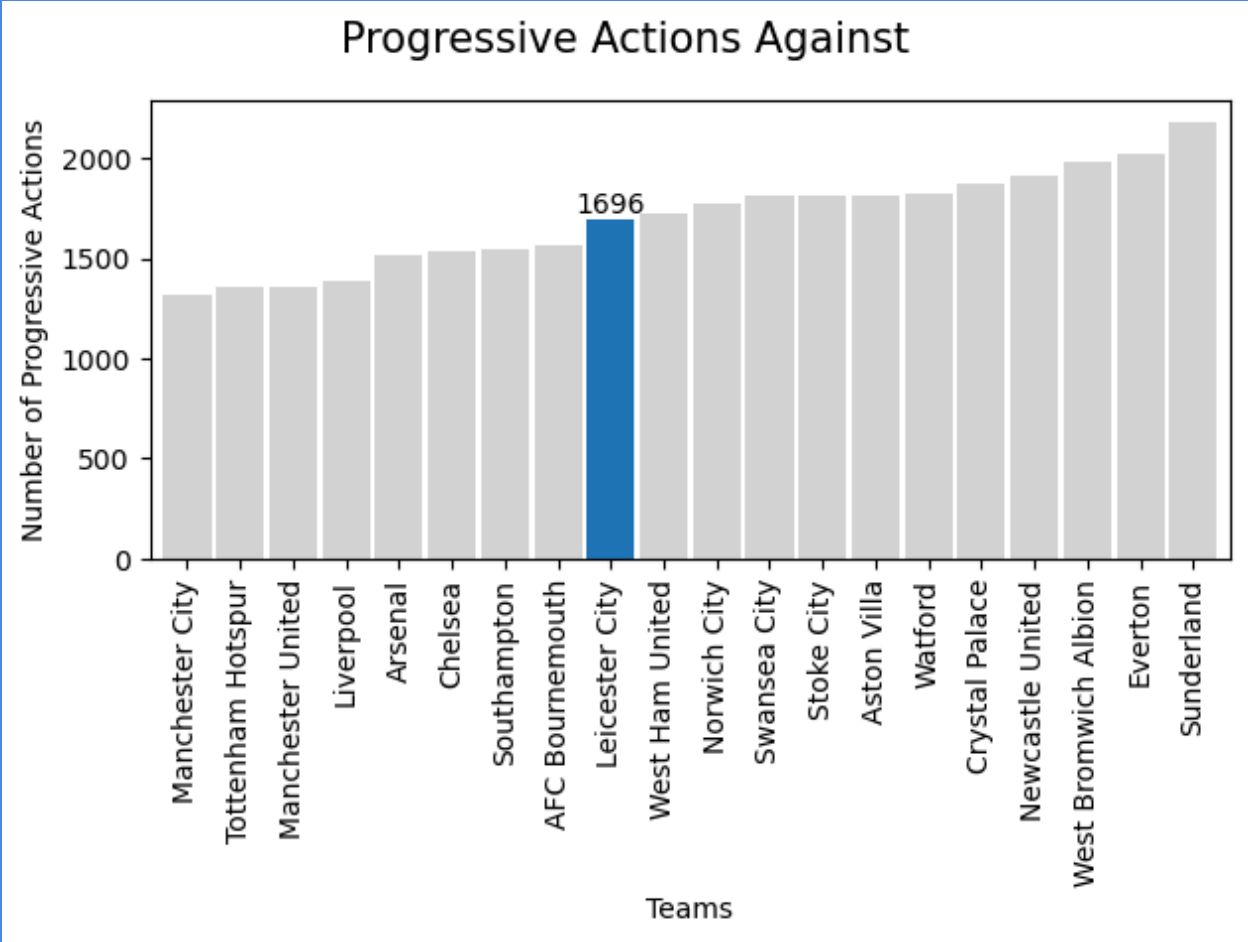
# Danger Passes & Areas of Danger

Passes dominate the game of football. On average a player at the professional level has possession of the ball for about 30 to 90 seconds in a 90 minute game. With this in mind, I wanted to capture the passes that were directly involved in the build up to a shot. I define these passes as danger passes; these are the passes that lead to a shot within 15 seconds of being received. The team leaders in this statistic were Danny Drinkwater and Riyad Mahrez who both averaged three danger passes per game. As a team, Leicester City finished in the bottom 5 of the EPL in danger passes. While Leicester City did not have a high frequency of danger passes compared to the rest of the Premier League, they did have the 4th highest average distance for their danger passes. This further suggests that Leicester focused on playing direct football, often hitting teams on the counterattack rather than moving the ball up the field with a large volume of passes.

Figure 17:

Figure 18:



Danger Passes by Team

Figure 19:



Average Pass Length for Dangerous Passes
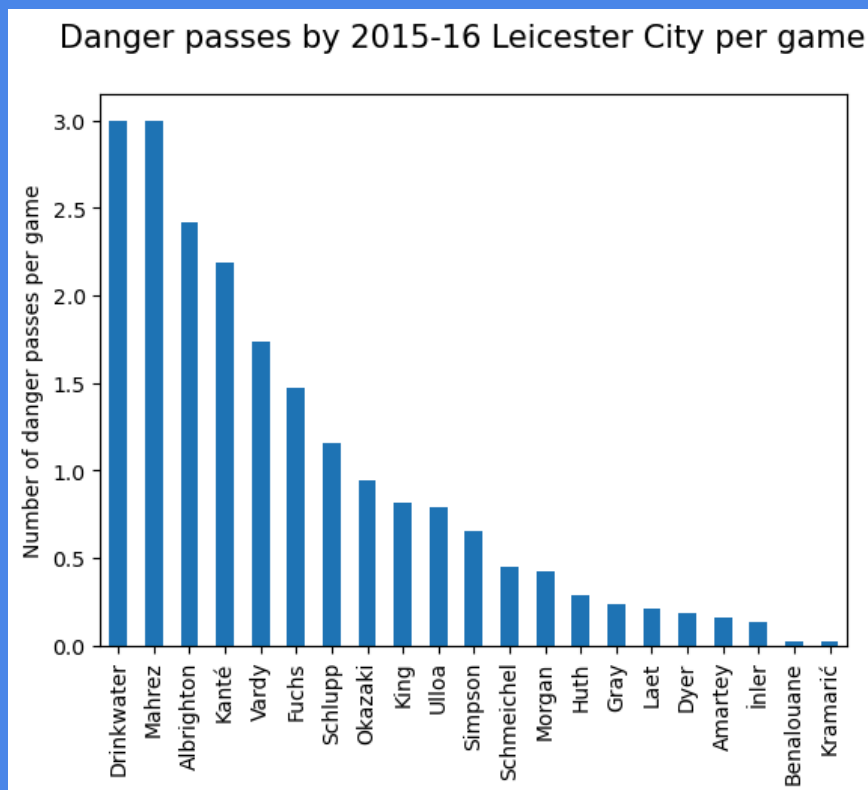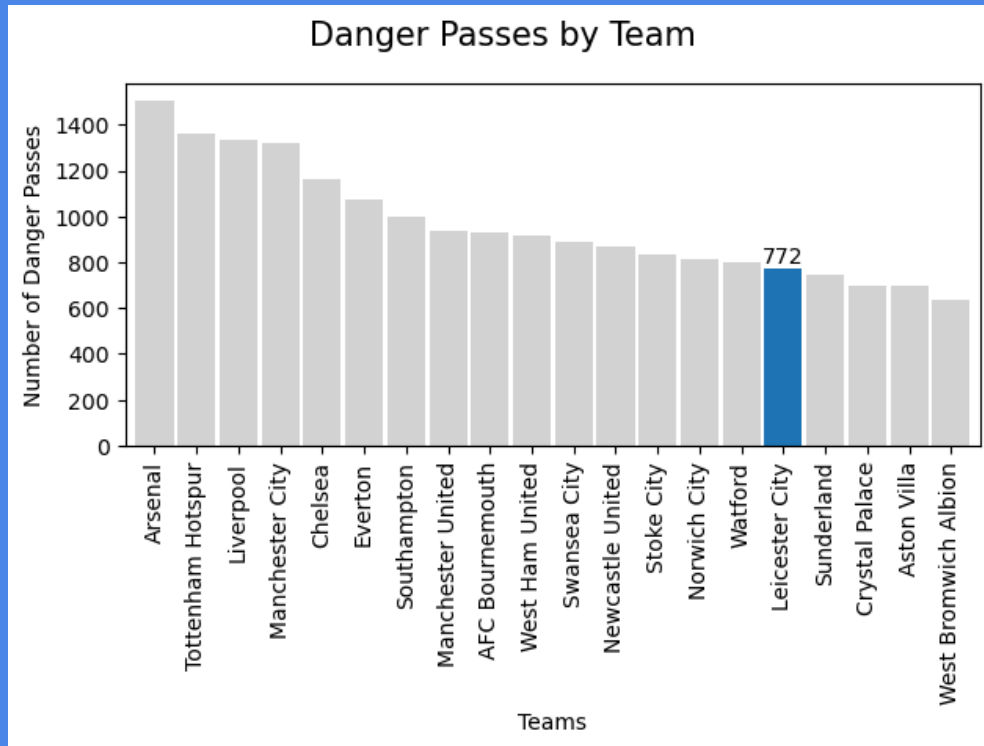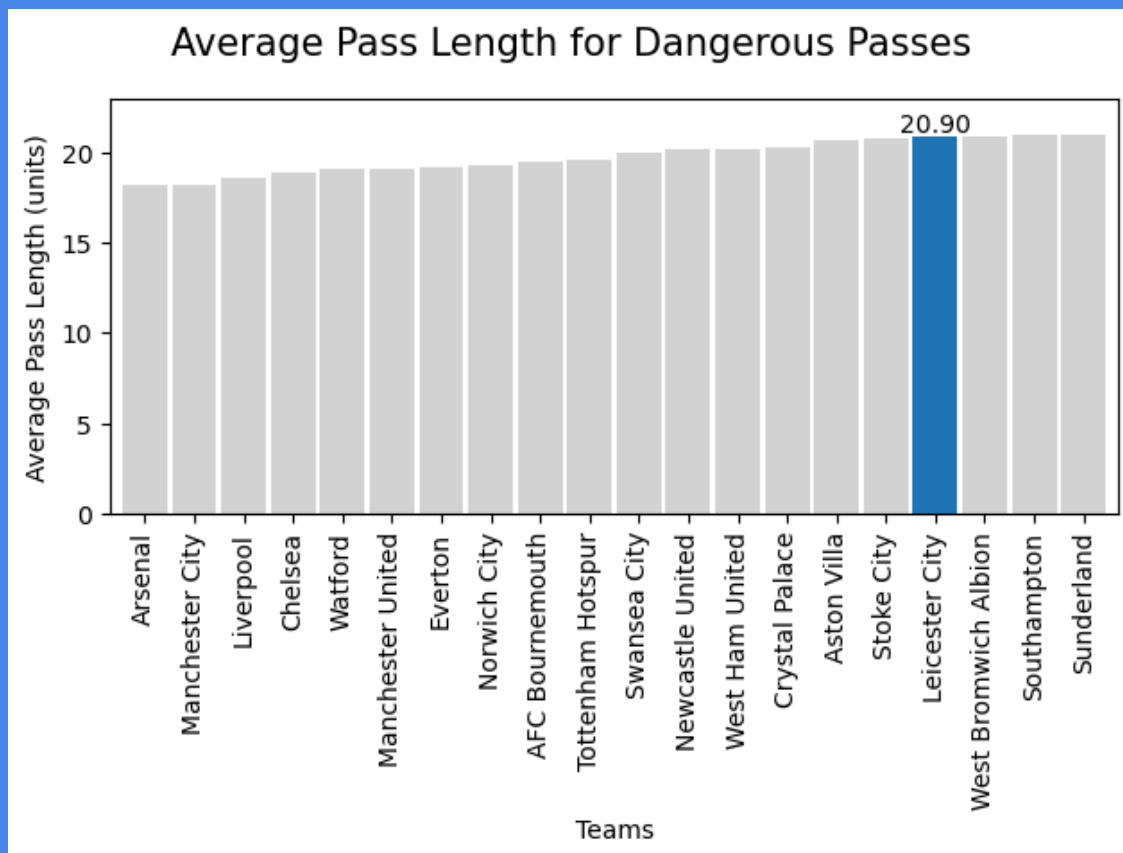
To further understand how Leicester City found their success, I wanted to determine if they had attacking preferences or deliberate strategies to control the ball in certain areas of the pitch when in possession. This was done by creating a heatmap capturing the location where the ball was controlled 15 seconds prior to a shot. From this plot, we can see that Leicester City possessions were extremely likely to end in a shot when they had control of it in the attacking area closest to the opponents goal with a heavy bias on the right side. Interestingly, the team was not a major threat to shoot the ball when controlling the ball within the attacking midfield position. Instead, a shot was more likely when they had control of it within their own half, particularly the right side and their defensive third.

Figure 20:



Danger Areas (Shots) - Performance Above Zone Average (15-16' EPL Season)
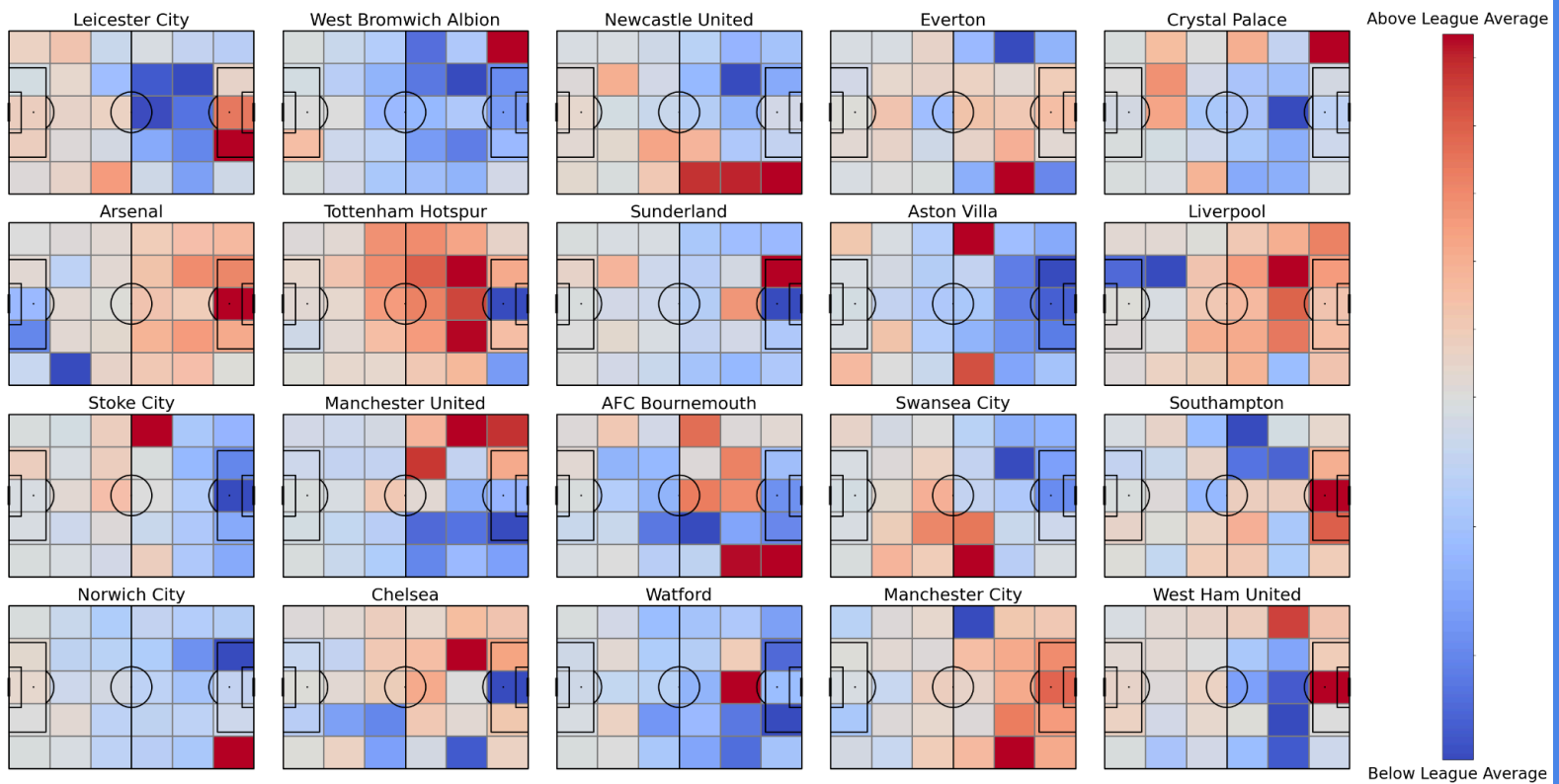
Leicester City were most likely going to shoot the ball when they had control of it within the areas discussed above, but what about goals? Based on this heatmap, we can see that Leicester City were extremely dangerous when the ball was inside the penalty area and the area to the right of it. In fact, when Leicester City had possession of the ball within the area beside the right corner flag, it was given that they would create a deadly attacking play. They were the most dangerous team in the Premier League when they had possession in this area. The team also ranked above average on the left flank and within their own goalkeeper's penalty area. This made defending the Leicester City attack a nightmare for teams since they were dangerous from many different areas of the pitch.

Figure 21:



Danger Areas (Goals) -
Performance Above Zone Average (15-16' EPL Season)
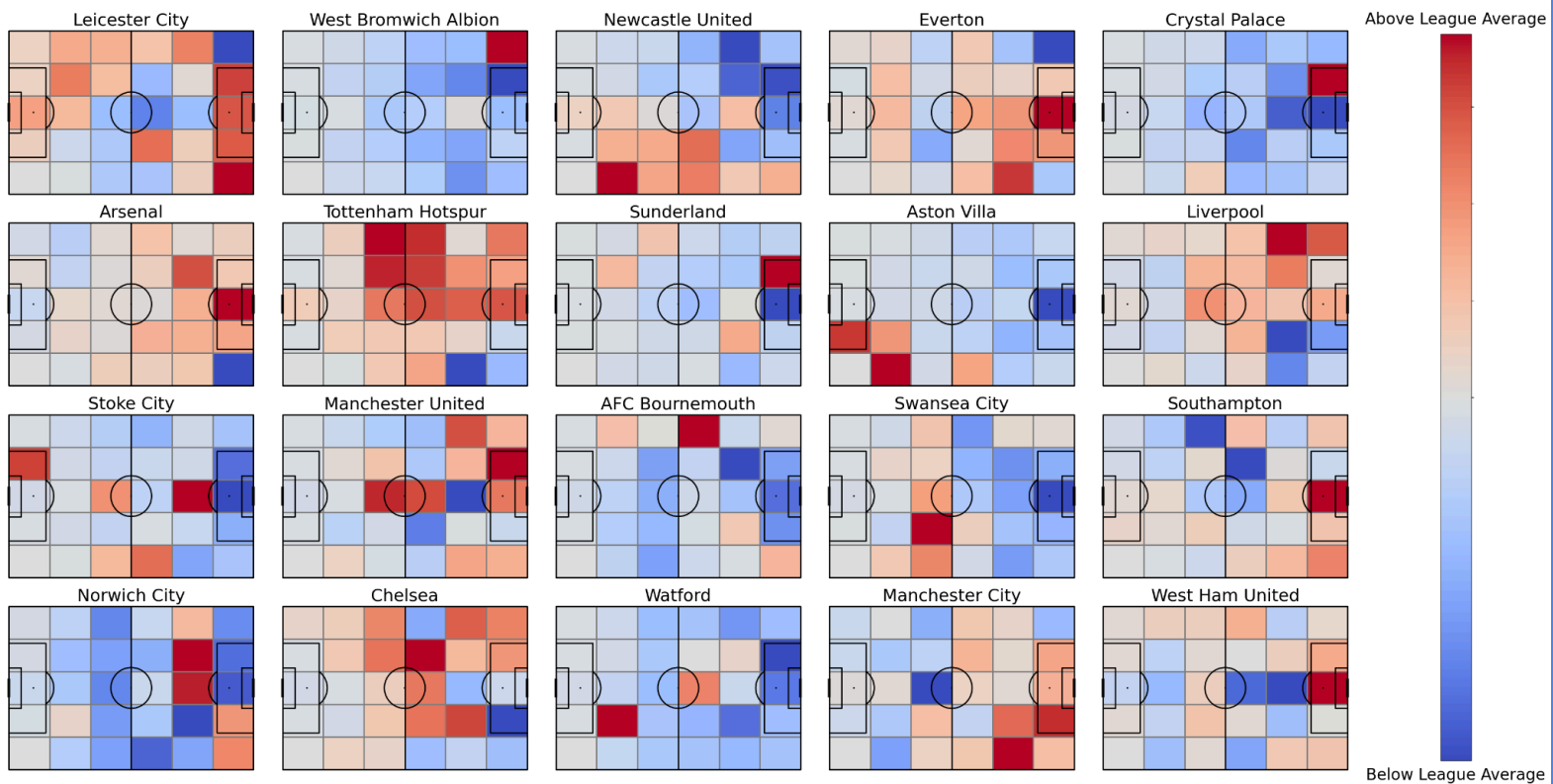
# Final Third Entries

As you can probably guess, Leicester City ranked towards the bottom of the league in final third entries per game. They also ranked in the middle of the pack in final third entries against per game. When they got the ball into the opposition's final third, they were able to punish them. Conversely, when their opponents got the ball within their final third they would bend but not break as shown in the xGA back in Figure 8.

Figure 22:

Figure 23:



2015-16 Final Third Entries Against Per Game
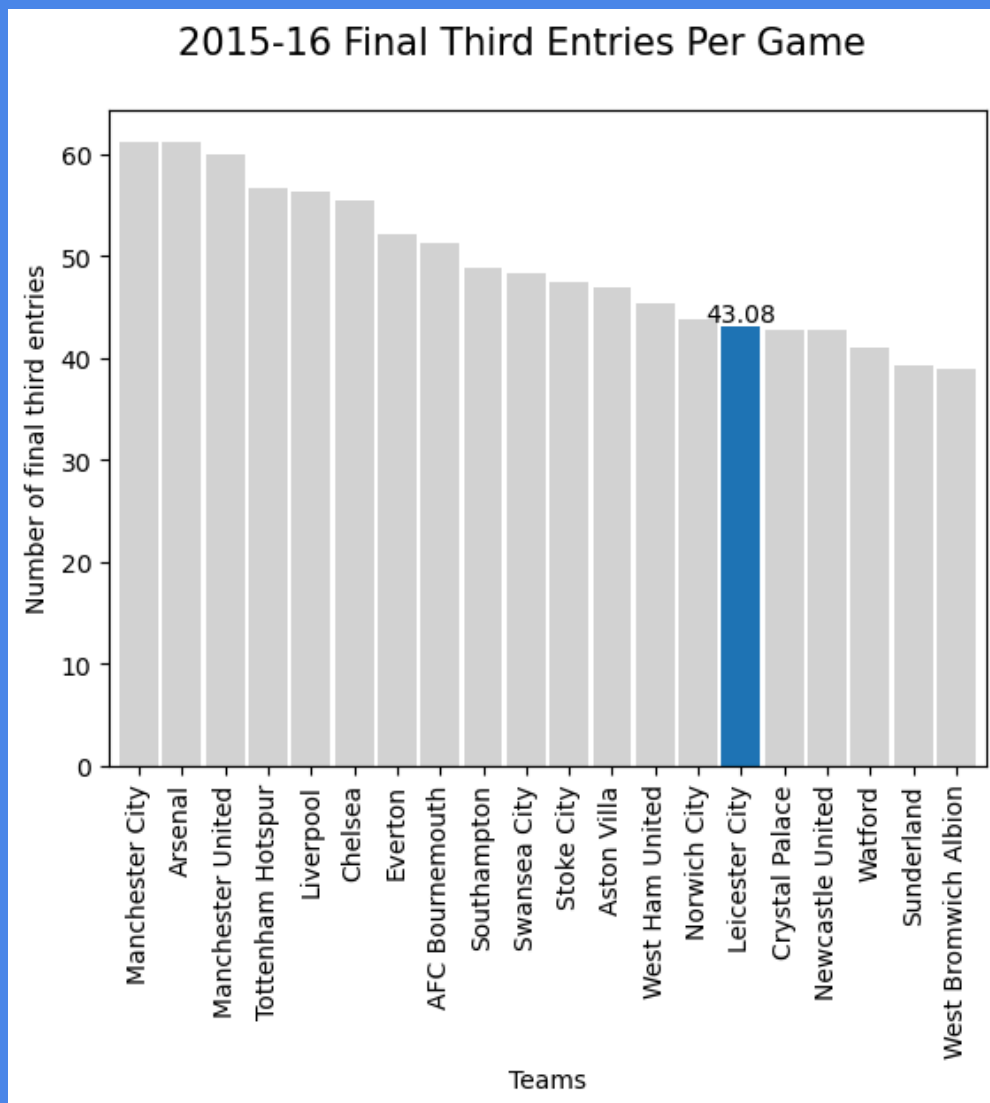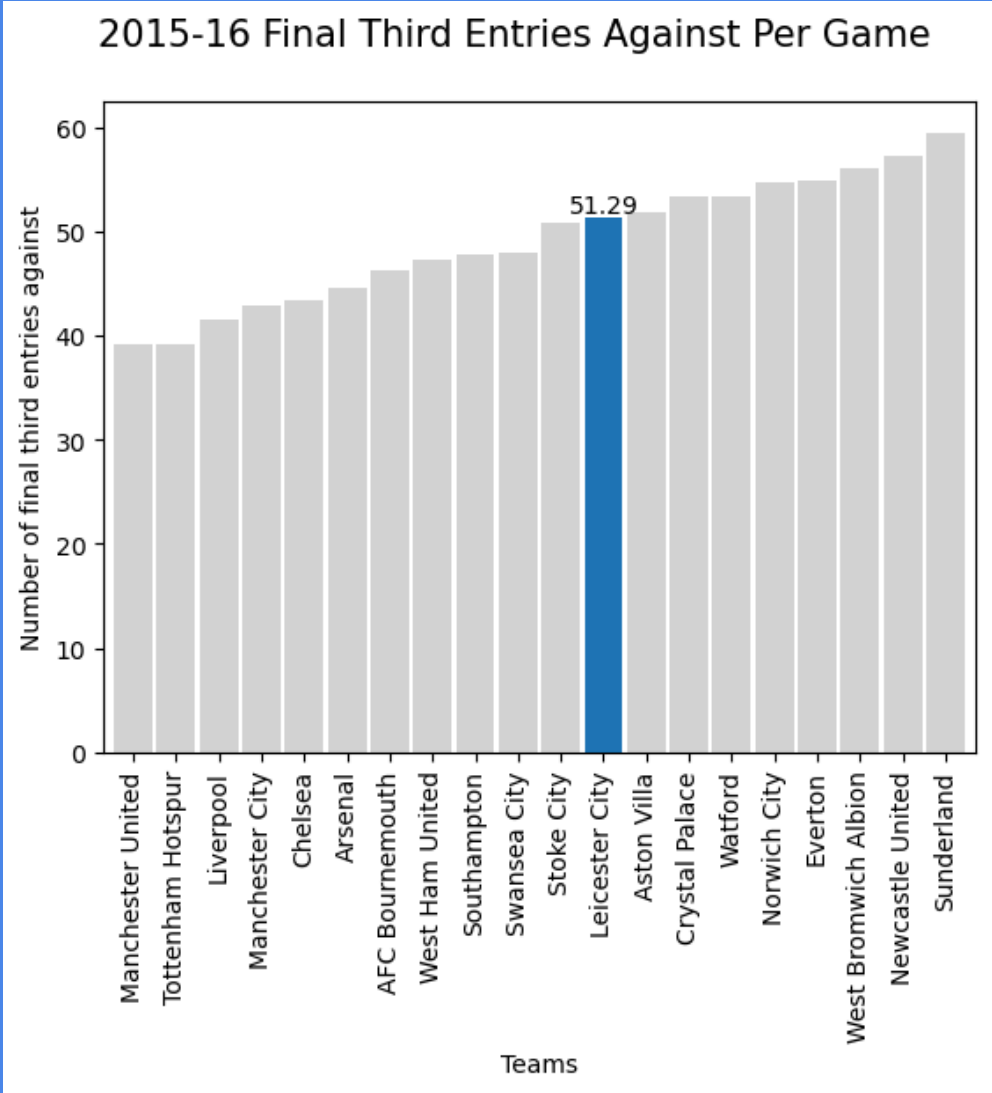
# Patterns of Play

Now that the data was telling me that Leicester City played a direct style of football, I wanted to determine how most of their shots and goals came about. To do this, I looked at the play pattern for all of their shots and goals and compared them to the rest of the Premier League using a stacked bar chart. For shots, Leicester City has a similar profile to teams with similar shot attempts. Although, they did have more shots from penalty kicks and from counterattacks. By looking at the play pattern of their goals, the biggest observation is that Leicester City scored a much higher proportion of their goals from penalty kicks than any other club. In fact, that season, Leicester City scored 10 goals from the penalty spot while the club with the second highest mark was Norwich City with 6 goals from penalties. While there is certainly some luck involved in winning that many penalty kicks, it is also a positive outcome that results from playing a direct style of football. By sending direct balls and attackers towards the defending team's penalty area, the likelihood of winning a penalty kick increases drastically.

Another notable result was that Leicester City averaged one counterattack shot per game which is tied with the most in the Premier League. They also had the highest counterattack xG that season at 6.66. This means that Leicester City created the most dangerous chances from the counterattack in the EPL that season. Riyad Mahrez and Jamie Vardy were invaluable in these situations due to their ability to play at a high tempo, beat players off the dribble and convert their chances into goals.

Total Shots by Team and Play Pattern

Total Goals by Team and Play Pattern

Figure 26:



Set Piece Goals
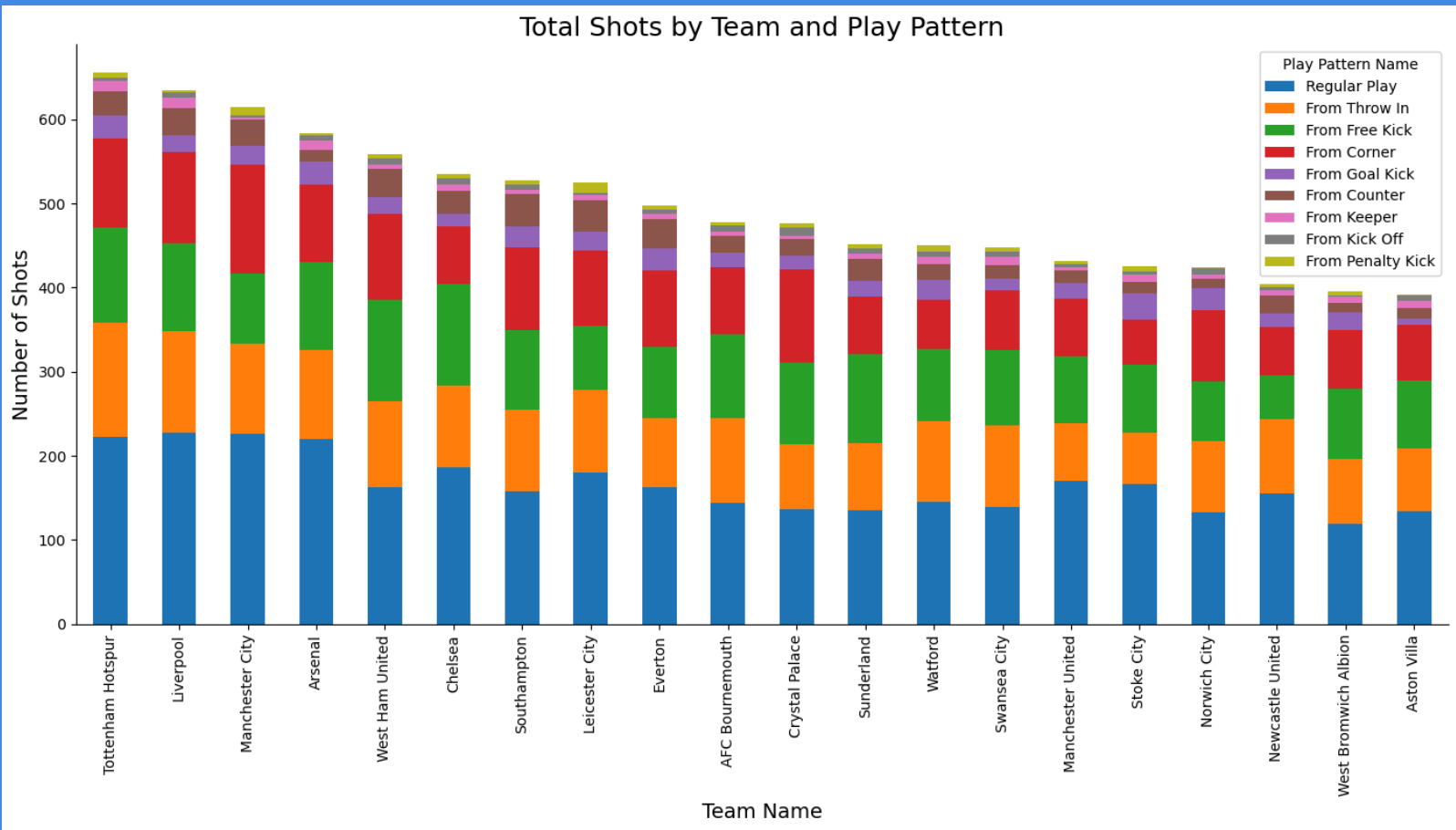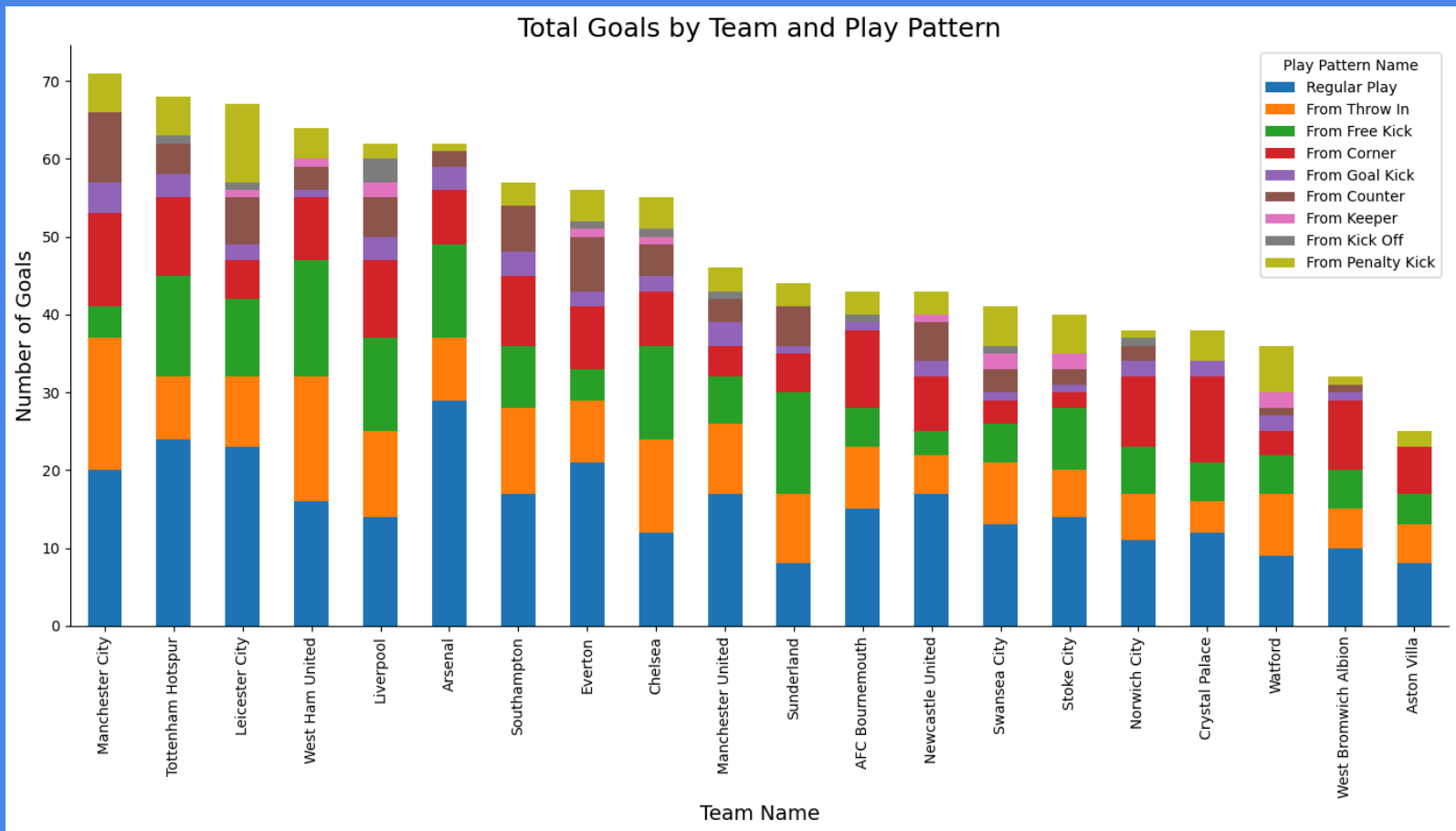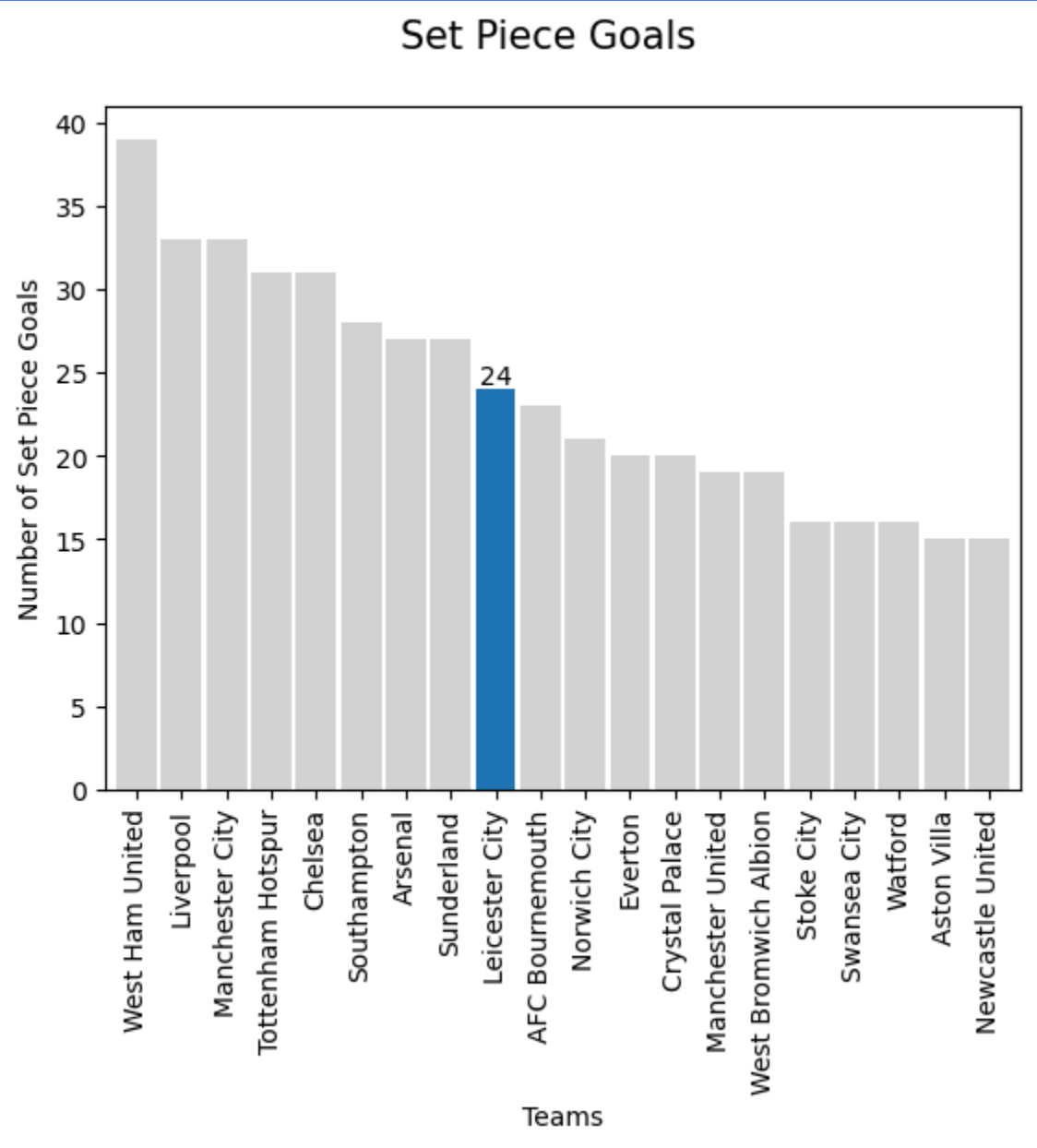
# Clustering Playstyles

To bring it all together, I decided to cluster the 20 teams in the EPL based on ball possession, short passes per game divided by long passes per game (SPPLBP), and non-penalty xG. This simple methodology was inspired by Amyr Mahdy's article *Decoding Football Teams: Unveiling Playing Styles Through Clustering Analysis.*

I chose to categorize the teams into 4 clusters using the elbow method and reviewed the results to see if they made sense. The results from this cluster analysis were interesting as I was able to categorize the teams into 4 distinct archetypes. The first cluster group Cluster 0 is named the Bottom Dwellers. This group of teams rank poorly in possession, non-penalty xG, and SPPLBP. These teams often concede control of the game to their opponents who take the opportunities to create dangerous chances. Ranking poorly in all three areas indicates that the team is more often than not trying to survive waves of an opponent's attack without conceding. The low SPPLBP could indicate that the team is trying to catch their opponents on the counterattack with long balls. It could also indicate that they are trying to relieve immediate pressure by playing hopeful long balls. The teams within this cluster are Sunderland, West Bromwich Albion, Newcastle United, Crystal Palace, Aston Villa, Stoke City, Norwich City, and Watford.

Cluster 1 is named the Dominant Powerhouses. The teams in this group rank well in possession, non-penalty xG, and SPPLBP. In short, this group displays the characteristics of a typical title contender, teams that not only achieve results but command dominance of the game through controlled short passes, high possession, and dangerous chance creation. The teams in this cluster are Manchester City, Arsenal, Chelsea, Liverpool, and Tottenham.

Cluster 2 is named Long Ball Specialists. These teams have lower SPPLBP values but rank well in the non-penalty xG category. Leicester City

belong to this cluster along with Southampton and West Ham United. It is important to note that among these three teams, Leicester City had a significantly lower possession percentage.

Finally, Cluster 3 is named Short Passing Possession Based for self explanatory reasons. These teams rank well in SPPLBP and possession, although not quite at the level of the Dominant Powerhouses. They also underperform in the non-penalty xG statistic. These teams include Manchester United, Swansea City, and AFC Bournemouth.

Figure 27:
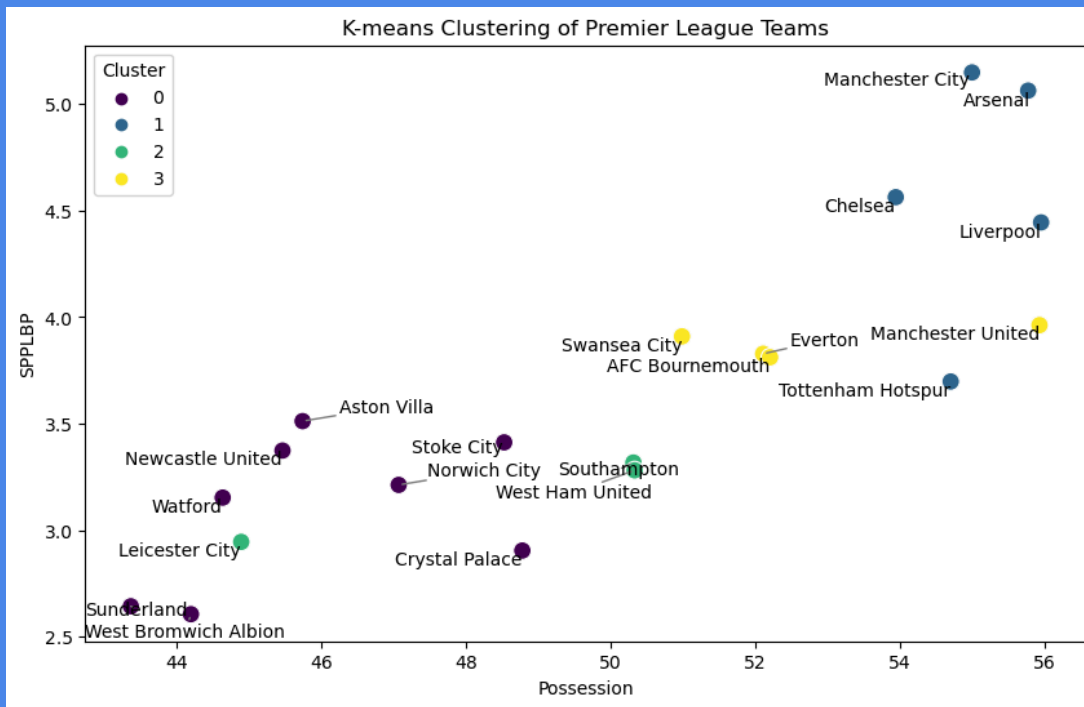
Table 3:

| Team | Possession | SPPLBP | npxGD | Cluster | Cluster Name |
|---|---|---|---|---|---|
| Leicester City | 44.896397 | 2.944851 | 13.097120 | 2 | Long Ball Specialists |
| West Bromwich Albion | 44.201728 | 2.605419 | -9.287781 | 0 | Bottom Dwellers |
| Newcastle United | 45.466932 | 3.373601 | -14.073631 | 0 | Bottom Dwellers |
| Everton | 52.108191 | 3.828190 | -3.010160 | 3 | Short Passing Possession Based |
| Crystal Palace | 48.780781 | 2.904174 | -11.201027 | 0 | Bottom Dwellers |
| Arsenal | 55.769844 | 5.063818 | 30.777940 | 1 | Dominant Powerhouses |
| Tottenham Hotspur | 54.699911 | 3.697950 | 24.444483 | 1 | Dominant Powerhouses |
| Sunderland | 43.371426 | 2.642535 | -14.809058 | 0 | Bottom Dwellers |
| Aston Villa | 45.745087 | 3.511958 | -27.712551 | 0 | Bottom Dwellers |
| Liverpool | 55.948688 | 4.444952 | 21.129583 | 1 | Dominant Powerhouses |
| Stoke City | 48.529901 | 3.412142 | -14.867692 | 0 | Bottom Dwellers |
| Manchester United | 55.926966 | 3.962594 | 2.896339 | 3 | Short Passing Possession Based |
| AFC Bournemouth | 52.203869 | 3.811803 | -4.785217 | 3 | Short Passing Possession Based |
| Swansea City | 50.986796 | 3.909917 | -10.944113 | 3 | Short Passing Possession Based |
| Southampton | 50.315877 | 3.317418 | 12.122435 | 2 | Long Ball Specialists |
| Norwich City | 47.072415 | 3.212497 | -13.462686 | 0 | Bottom Dwellers |
| Chelsea | 53.940996 | 4.563546 | 4.827552 | 1 | Dominant Powerhouses |
| Watford | 44.640985 | 3.152792 | -8.546262 | 0 | Bottom Dwellers |
| Manchester City | 54.994350 | 5.149188 | 20.011621 | 1 | Dominant Powerhouses |
| West Ham United | 50.332996 | 3.281011 | 3.393102 | 2 | Long Ball Specialists |

# Measuring on-ball Value Using xT

Undoubtedly, having an identity and committing to a playstyle contributes to good performances but in the end, it is the players on the field who ultimately determine the outcome of games. Thanks to advancements within soccer analytics over the past decade plus, we can quantify a player's on ball value using position-based xT and value added xT. Position-based xT is calculated by determining the probability of a shot being taken from an area of the pitch and multiplying this value by the probability of a goal given a shot from that specific location. This allows us to determine the value added of each pass and carry.

Based on this position-based xT, Danny Drinkwater made the list of the top 25 players in total xT that season. Marc Albrighton and Riyad Mahrez both made the top 25 in xT/action. This statistic takes the player's xT value and divides it by the total number of actions the player was involved in. Retrospectively, Riyad Mahrez is praised for being a key difference maker for this Leicester City side. He was rewarded with a major move to Manchester City and has had an amazing career after his Leicester City tenure. However, it cannot be understated how important the play of Danny Drinkwater and Marc Albrighton were for this team's success. I am glad this statistic shines the spotlight on these players who are often quick to be overlooked but were pivotal to Leicester City's success.

Table 4:

## Top 25 Players by Total xT

| Player | Team | Total Minutes | Number of Actions | Total_xT | xT/90 | xT/action |
|---|---|---|---|---|---|---|
| Francesc Fàbregas i Soler | Chelsea | 3112.800000 | 2754 | 24.797315 | 0.716962 | 0.009004 |
| Mesut Özil | Arsenal | 3197.783333 | 2351 | 21.079706 | 0.593278 | 0.008966 |
| Gareth Barry | Everton | 3054.966667 | 2057 | 16.553076 | 0.487657 | 0.008047 |
| Aaron Ramsey | Arsenal | 2792.216667 | 2198 | 16.467876 | 0.530800 | 0.007492 |
| Alexis Alejandro Sánchez Sánchez | Arsenal | 2570.800000 | 1619 | 15.921436 | 0.557387 | 0.009834 |
| Christian Dannemann Eriksen | Tottenham Hotspur | 3102.983333 | 1882 | 14.516561 | 0.421043 | 0.007713 |
| Danny Drinkwater | Leicester City | 3237.683333 | 2007 | 14.130082 | 0.392783 | 0.007040 |
| Mark Noble | West Ham United | 3438.200000 | 1901 | 14.079931 | 0.368563 | 0.007407 |
| Daley Blind | Manchester United | 3304.716667 | 2028 | 14.049056 | 0.382609 | 0.006928 |
| Fernando Luiz Rosa | Manchester City | 2915.100000 | 1900 | 13.897869 | 0.429079 | 0.007315 |
| Andrew Surman | AFC Bournemouth | 3670.416667 | 2264 | 13.854416 | 0.339716 | 0.006119 |
| David Josué Jiménez Silva | Manchester City | 1884.116667 | 1446 | 13.616047 | 0.650408 | 0.009416 |
| Steven Davis | Southampton | 2762.650000 | 1536 | 13.194564 | 0.429845 | 0.008590 |
| Ross Barkley | Everton | 3267.683333 | 1935 | 12.940261 | 0.356406 | 0.006687 |
| Eden Hazard | Chelsea | 2368.400000 | 1543 | 12.847463 | 0.488208 | 0.008326 |
| Juan Manuel Mata García | Manchester United | 3117.800000 | 1867 | 12.701684 | 0.366653 | 0.006803 |
| Willian Borges da Silva | Chelsea | 2924.300000 | 1616 | 12.598897 | 0.387751 | 0.007796 |
| Gnégnéri Yaya Touré | Manchester City | 2465.850000 | 1866 | 12.586485 | 0.459389 | 0.006745 |
| Eric Dier | Tottenham Hotspur | 3463.100000 | 2072 | 12.563274 | 0.326498 | 0.006063 |
| Dimitri Payet | West Ham United | 2758.933333 | 1424 | 12.406193 | 0.404706 | 0.008712 |
| Toby Alderweireld | Tottenham Hotspur | 3639.100000 | 2060 | 12.360895 | 0.305702 | 0.006000 |
| Simon Francis | AFC Bournemouth | 3670.416667 | 2187 | 12.260710 | 0.300637 | 0.005606 |
| Yann Gérard M''Vila | Sunderland | 3422.550000 | 1744 | 12.242862 | 0.321941 | 0.007020 |
| Aaron Cresswell | West Ham United | 3575.000000 | 1535 | 12.205287 | 0.307266 | 0.007951 |
| Michael Carrick | Manchester United | 2098.600000 | 1541 | 12.032158 | 0.516008 | 0.007808 |

Table 5:

## Top 25 Players by xT/90

| Player | Team | Total Minutes | Number of Actions | Total_xT | xT/90 | xT/action |
|---|---|---|---|---|---|---|
| Santiago Cazorla González | Arsenal | 1381.066667 | 1254 | 11.268518 | 0.734336 | 0.008986 |
| Francesc Fàbregas i Soler | Chelsea | 3112.800000 | 2754 | 24.797315 | 0.716962 | 0.009004 |
| David Josué Jiménez Silva | Manchester City | 1884.116667 | 1446 | 13.616047 | 0.650408 | 0.009416 |
| Mesut Özil | Arsenal | 3197.783333 | 2351 | 21.079706 | 0.593278 | 0.008966 |
| Alexis Alejandro Sánchez Sánchez | Arsenal | 2570.800000 | 1619 | 15.921436 | 0.557387 | 0.009834 |
| Aaron Ramsey | Arsenal | 2792.216667 | 2198 | 16.467876 | 0.530800 | 0.007492 |
| Bastian Schweinsteiger | Manchester United | 1271.866667 | 1081 | 7.329938 | 0.518682 | 0.006781 |
| Michael Carrick | Manchester United | 2098.600000 | 1541 | 12.032158 | 0.516008 | 0.007808 |
| Jordan Brian Henderson | Liverpool | 1374.316667 | 971 | 7.774314 | 0.509117 | 0.008007 |
| Eden Hazard | Chelsea | 2368.400000 | 1543 | 12.847463 | 0.488208 | 0.008326 |
| Gareth Barry | Everton | 3054.966667 | 2057 | 16.553076 | 0.487657 | 0.008047 |
| Philippe Coutinho Correia | Liverpool | 2157.866667 | 1171 | 11.488990 | 0.479181 | 0.009811 |
| Samir Nasri | Manchester City | 583.300000 | 437 | 3.070520 | 0.473764 | 0.007026 |
| Mohamed Naser Elsayed Elneny | Arsenal | 837.733333 | 731 | 4.367029 | 0.469162 | 0.005974 |
| Gnégnéri Yaya Touré | Manchester City | 2465.850000 | 1866 | 12.586485 | 0.459389 | 0.006745 |
| Harry Arter | AFC Bournemouth | 1737.216667 | 1061 | 8.532551 | 0.442046 | 0.008042 |
| Kevin De Bruyne | Manchester City | 2131.950000 | 1260 | 10.450839 | 0.441181 | 0.008294 |
| Dušan Tadić | Southampton | 2406.750000 | 1084 | 11.655395 | 0.435851 | 0.010752 |
| Steven Davis | Southampton | 2762.650000 | 1536 | 13.194564 | 0.429845 | 0.008590 |
| Fernando Luiz Rosa | Manchester City | 2915.100000 | 1900 | 13.897869 | 0.429079 | 0.007315 |
| Christian Dannemann Eriksen | Tottenham Hotspur | 3102.983333 | 1882 | 14.516561 | 0.421043 | 0.007713 |
| James Philip Milner | Liverpool | 2594.316667 | 1431 | 11.885812 | 0.412333 | 0.008306 |
| Alex Iwobi | Arsenal | 660.533333 | 390 | 2.996562 | 0.408292 | 0.007683 |
| Jonjo Shelvey | Swansea City/Newcastle United | 2415.316667 | 1483 | 10.873928 | 0.405186 | 0.007332 |
| Dimitri Payet | West Ham United | 2758.933333 | 1424 | 12.406193 | 0.404706 | 0.008712 |

Table 6:

## Top 25 Players by xT/action

| Player | Team | Total Minutes | Number of Actions | Total_xT | xT/90 | xT/action |
|---|---|---|---|---|---|---|
| Dušan Tadić | Southampton | 2406.750000 | 1084 | 11.655395 | 0.435851 | 0.010752 |
| Alexis Alejandro Sánchez Sánchez | Arsenal | 2570.800000 | 1619 | 15.921436 | 0.557387 | 0.009834 |
| Philippe Coutinho Correia | Liverpool | 2157.866667 | 1171 | 11.488990 | 0.479181 | 0.009811 |
| David Josué Jiménez Silva | Manchester City | 1884.116667 | 1446 | 13.616047 | 0.650408 | 0.009416 |
| Marc Albrighton | Leicester City | 2904.283333 | 1165 | 10.659122 | 0.330312 | 0.009149 |
| Adam Johnson | Sunderland | 1241.566667 | 575 | 5.231043 | 0.379193 | 0.009097 |
| Francesc Fàbregas i Soler | Chelsea | 3112.800000 | 2754 | 24.797315 | 0.716962 | 0.009004 |
| Santiago Cazorla González | Arsenal | 1381.066667 | 1254 | 11.268518 | 0.734336 | 0.008986 |
| Mesut Özil | Arsenal | 3197.783333 | 2351 | 21.079706 | 0.593278 | 0.008966 |
| Riyad Mahrez | Leicester City | 3174.633333 | 1280 | 11.426692 | 0.323944 | 0.008927 |
| Wilfried Zaha | Crystal Palace | 2647.316667 | 862 | 7.528027 | 0.255928 | 0.008733 |
| Gerard Deulofeu Lázaro | Everton | 1483.383333 | 695 | 6.056657 | 0.367470 | 0.008715 |
| Dimitri Payet | West Ham United | 2758.933333 | 1424 | 12.406193 | 0.404706 | 0.008712 |
| Rhu-endly Martina | Southampton | 1165.100000 | 466 | 4.043612 | 0.312355 | 0.008677 |
| Steven Davis | Southampton | 2762.650000 | 1536 | 13.194564 | 0.429845 | 0.008590 |
| Eden Hazard | Chelsea | 2368.400000 | 1543 | 12.847463 | 0.488208 | 0.008326 |
| Chris Brunt | West Bromwich Albion | 1918.333333 | 647 | 5.386750 | 0.252723 | 0.008326 |
| James Philip Milner | Liverpool | 2594.316667 | 1431 | 11.885812 | 0.412333 | 0.008306 |
| Kevin De Bruyne | Manchester City | 2131.950000 | 1260 | 10.450839 | 0.441181 | 0.008294 |
| Jan Kirchhoff | Sunderland | 1132.266667 | 575 | 4.643905 | 0.369128 | 0.008076 |
| Gareth Barry | Everton | 3054.966667 | 2057 | 16.553076 | 0.487657 | 0.008047 |
| Harry Arter | AFC Bournemouth | 1737.216667 | 1061 | 8.532551 | 0.442046 | 0.008042 |
| Jordan Brian Henderson | Liverpool | 1374.316667 | 971 | 7.774314 | 0.509117 | 0.008007 |
| Wes Hoolahan | Norwich City | 2093.966667 | 1171 | 9.325950 | 0.400835 | 0.007964 |
| Daniel Nii Tackie Mensah Welbeck | Arsenal | 606.633333 | 170 | 1.352507 | 0.200658 | 0.007956 |

Before proceeding, I must give a proper acknowledgement to Sarah Rudd who presented her xT statistic at the 2011 MIT Sloan Sports Analytics Conference. This statistic was derived by using Markov Chains in possession. Her analysis paved the way for the creation of action-based xT which is able to assign a value to each play within a possession chain.

Since the statistic is using possessions that end in a shot, the top 25 players on these lists will naturally be filled with forwards. In fact, every player who is on the three lists played in an attacking role at some point during this season. For this reason, I believe that action-based xT is a good measure for attacking players and not so much for midfielders and defenders. The players that stand out from Leicester City are Jamie Vardy, Riyad Mahrez, Shinji Okazaki, and Jose Ulloa. These players all stepped up to provide major contributions for a Leicester City attack that scored the third most goals in the Premier League that season. Jamie Vardy appears on all three lists which indicates how potent and reliable he was for Leicester City's attacking success.

Table 7:

## Top 25 Players by Total_xT

| Player | Team | Position | Total Minutes | Number of Actions | Total_xT | xT/90 | xT/action |
|---|---|---|---|---|---|---|---|
| Harry Kane | Tottenham Hotspur | Forward | 3556.566667 | 314 | 17.628891 | 0.446104 | 0.056143 |
| Jamie Vardy | Leicester City | Forward | 3379.616667 | 247 | 17.466217 | 0.465130 | 0.070713 |
| Odion Jude Ighalo | Watford | Forward/Midfielder | 3339.850000 | 222 | 16.806783 | 0.452898 | 0.075706 |
| Romelu Lukaku Menama | Everton | Forward | 3388.516667 | 257 | 16.552805 | 0.439647 | 0.064408 |
| Sergio Leonel Agüero del Castillo | Manchester City | Forward | 2482.533333 | 191 | 13.733297 | 0.497877 | 0.071902 |
| Jermain Defoe | Sunderland | Forward/Midfielder | 2742.966667 | 157 | 12.400362 | 0.406871 | 0.078983 |
| Olivier Giroud | Arsenal | Forward | 2593.000000 | 229 | 12.111880 | 0.420389 | 0.052890 |
| Diego da Silva Costa | Chelsea | Forward | 2541.766667 | 179 | 11.793748 | 0.417598 | 0.065887 |
| Sadio Mané | Southampton | Forward/Midfielder | 2755.616667 | 232 | 11.234742 | 0.366933 | 0.048426 |
| Alexis Alejandro Sánchez Sánchez | Arsenal | Forward | 2570.800000 | 294 | 11.190849 | 0.391775 | 0.038064 |
| Aleksandar Mitrović | Newcastle United | Forward/Midfielder | 2369.350000 | 191 | 10.255506 | 0.389556 | 0.053694 |
| Christian Benteke Liolo | Liverpool | Forward/Midfielder | 1667.000000 | 142 | 10.179551 | 0.549586 | 0.071687 |
| Marko Arnautović | Stoke City | Forward/Midfielder | 2976.866667 | 252 | 8.648440 | 0.261469 | 0.034319 |
| Bamidele Alli | Tottenham Hotspur | Forward/Midfielder | 2581.650000 | 236 | 8.322819 | 0.290145 | 0.035266 |
| José Salomón Rondón Giménez | West Bromwich Albion | Forward/Midfielder | 2712.900000 | 187 | 8.215272 | 0.272540 | 0.043932 |
| Shane Long | Southampton | Forward/Midfielder | 2263.250000 | 156 | 7.956280 | 0.316388 | 0.051002 |
| Graziano Pellè | Southampton | Forward/Midfielder | 2342.966667 | 210 | 7.659532 | 0.294224 | 0.036474 |
| André Ayew Pelé | Swansea City | Forward/Midfielder | 3093.750000 | 231 | 7.561902 | 0.219983 | 0.032736 |
| Riyad Mahrez | Leicester City | Forward/Midfielder | 3174.633333 | 242 | 7.419358 | 0.210337 | 0.030659 |
| Aaron Ramsey | Arsenal | Forward/Midfielder | 2792.216667 | 343 | 7.373328 | 0.237660 | 0.021497 |
| Diafra Sakho | West Ham United | Forward/Midfielder | 1618.983333 | 109 | 7.327376 | 0.407332 | 0.067224 |
| Roberto Firmino Barbosa de Oliveira | Liverpool | Forward/Midfielder | 2101.616667 | 208 | 7.313159 | 0.313180 | 0.035159 |
| Cameron Jerome | Norwich City | Forward/Midfielder | 1907.450000 | 117 | 7.278571 | 0.343428 | 0.062210 |
| Shinji Okazaki | Leicester City | Forward/Midfielder | 2174.183333 | 155 | 7.100457 | 0.293922 | 0.045809 |
| Philippe Coutinho Correia | Liverpool | Forward/Midfielder | 2157.866667 | 261 | 7.051403 | 0.294099 | 0.027017 |

## Table 8:

### Top 25 Players by xT/90

| Player | Team | Position | Total Minutes | Number of Actions | Total_xT | xT/90 | xT/action |
|---|---|---|---|---|---|---|---|
| Christian Benteke Liolo | Liverpool | Forward/Midfielder | 1667.000000 | 142 | 10.179551 | 0.549586 | 0.071687 |
| Kelechi Promise Iheanacho | Manchester City | Forward/Midfielder | 853.516667 | 71 | 5.031806 | 0.530584 | 0.070871 |
| Sergio Leonel Agüero del Castillo | Manchester City | Forward | 2482.533333 | 191 | 13.733297 | 0.497877 | 0.071902 |
| Jamie Vardy | Leicester City | Forward | 3379.616667 | 247 | 17.466217 | 0.465130 | 0.070713 |
| José Leonardo Ulloa | Leicester City | Defender/Forward/Midfielder | 1089.316667 | 124 | 5.624830 | 0.464727 | 0.045362 |
| Odion Jude Ighalo | Watford | Forward/Midfielder | 3339.850000 | 222 | 16.806783 | 0.452898 | 0.075706 |
| Daniel Nii Tackie Mensah Welbeck | Arsenal | Forward/Midfielder | 606.633333 | 41 | 3.019849 | 0.448024 | 0.073655 |
| Harry Kane | Tottenham Hotspur | Forward | 3556.566667 | 314 | 17.628891 | 0.446104 | 0.056143 |
| Daniel Andre Sturridge | Liverpool | Forward | 1042.983333 | 90 | 5.109448 | 0.440899 | 0.056772 |
| Wilfried Guemiand Bony | Manchester City | Forward/Midfielder | 1318.166667 | 102 | 6.444377 | 0.440000 | 0.063180 |
| Romelu Lukaku Menama | Everton | Forward | 3388.516667 | 257 | 16.552805 | 0.439647 | 0.064408 |
| Olivier Giroud | Arsenal | Forward | 2593.000000 | 229 | 12.111880 | 0.420389 | 0.052890 |
| Diego da Silva Costa | Chelsea | Forward | 2541.766667 | 179 | 11.793748 | 0.417598 | 0.065887 |
| Diafra Sakho | West Ham United | Forward/Midfielder | 1618.983333 | 109 | 7.327376 | 0.407332 | 0.067224 |
| Jermain Defoe | Sunderland | Forward/Midfielder | 2742.966667 | 157 | 12.400362 | 0.406871 | 0.078983 |
| Theo Walcott | Arsenal | Forward | 1459.150000 | 87 | 6.566711 | 0.405033 | 0.075479 |
| Alexis Alejandro Sánchez Sánchez | Arsenal | Forward | 2570.800000 | 294 | 11.190849 | 0.391775 | 0.038064 |
| Glenn Murray | AFC Bournemouth/Crystal Palace | Forward/Midfielder | 888.416667 | 55 | 3.847536 | 0.389770 | 0.069955 |
| Aleksandar Mitrović | Newcastle United | Forward/Midfielder | 2369.350000 | 191 | 10.255506 | 0.389556 | 0.053694 |
| Sadio Mané | Southampton | Forward/Midfielder | 2755.616667 | 232 | 11.234742 | 0.366933 | 0.048426 |
| Alberto Paloschi | Swansea City | Forward/Midfielder | 703.300000 | 46 | 2.838146 | 0.363192 | 0.061699 |
| Cameron Jerome | Norwich City | Forward/Midfielder | 1907.450000 | 117 | 7.278571 | 0.343428 | 0.062210 |
| Bafétimbi Gomis | Swansea City | Forward/Midfielder | 1847.516667 | 139 | 6.791260 | 0.330830 | 0.048858 |
| Shane Long | Southampton | Forward/Midfielder | 2263.250000 | 156 | 7.956280 | 0.316388 | 0.051002 |
| Dwight Gayle | Crystal Palace | Forward/Midfielder | 883.183333 | 44 | 3.100334 | 0.315937 | 0.070462 |

## Top 25 Players by xT/action

| Player | Team | Position | Total Minutes | Number of Actions | Total_xT | xT/90 | xT/action |
|--------|------|----------|--------------|-------------------|----------|-------|-----------|
| Jermain Defoe | Sunderland | Forward/Midfielder | 2742.966667 | 157 | 12.400362 | 0.406871 | 0.078983 |
| Odion Jude Ighalo | Watford | Forward/Midfielder | 3339.850000 | 222 | 16.806783 | 0.452898 | 0.075706 |
| Theo Walcott | Arsenal | Forward | 1459.150000 | 87 | 6.566711 | 0.405033 | 0.075479 |
| Daniel Nii Tackie Mensah Welbeck | Arsenal | Forward/Midfielder | 606.633333 | 41 | 3.019849 | 0.448024 | 0.073655 |
| Callum Wilson | AFC Bournemouth | Forward | 827.200000 | 34 | 2.488626 | 0.270764 | 0.073195 |
| Emmanuel Emenike | West Ham United | Defender/Forward/Midfielder | 566.800000 | 25 | 1.808954 | 0.287237 | 0.072358 |
| Sergio Leonel Agüero del Castillo | Manchester City | Forward | 2482.533333 | 191 | 13.733297 | 0.497877 | 0.071902 |
| Christian Benteke Liolo | Liverpool | Forward/Midfielder | 1667.000000 | 142 | 10.179551 | 0.549586 | 0.071687 |
| Kelechi Promise Iheanacho | Manchester City | Forward/Midfielder | 853.516667 | 71 | 5.031806 | 0.530584 | 0.070871 |
| Jamie Vardy | Leicester City | Forward | 3379.616667 | 247 | 17.466217 | 0.465130 | 0.070713 |
| Dwight Gayle | Crystal Palace | Forward/Midfielder | 883.183333 | 44 | 3.100334 | 0.315937 | 0.070462 |
| Glenn Murray | AFC Bournemouth/Crystal Palace | Forward/Midfielder | 888.416667 | 55 | 3.847536 | 0.389770 | 0.069955 |
| Diafra Sakho | West Ham United | Forward/Midfielder | 1618.983333 | 109 | 7.327376 | 0.407332 | 0.067224 |
| Diego da Silva Costa | Chelsea | Forward | 2541.766667 | 179 | 11.793748 | 0.417598 | 0.065887 |
| Romelu Lukaku Menama | Everton | Forward | 3388.516667 | 257 | 16.552805 | 0.439647 | 0.064408 |
| Wilfried Guemiand Bony | Manchester City | Forward/Midfielder | 1318.166667 | 102 | 6.444377 | 0.440000 | 0.063180 |
| Cameron Jerome | Norwich City | Forward/Midfielder | 1907.450000 | 117 | 7.278571 | 0.343428 | 0.062210 |
| Mame Biram Diouf | Stoke City | Defender/Forward/Midfielder | 1391.850000 | 78 | 4.817695 | 0.311522 | 0.061765 |
| Alberto Paloschi | Swansea City | Forward/Midfielder | 703.300000 | 46 | 2.838146 | 0.363192 | 0.061699 |
| Daniel Andre Sturridge | Liverpool | Forward | 1042.983333 | 90 | 5.109448 | 0.440899 | 0.056772 |
| Dieumerci Mbokani Bezua | Norwich City | Forward/Midfielder | 1730.616667 | 107 | 6.013599 | 0.312735 | 0.056202 |
| Harry Kane | Tottenham Hotspur | Forward | 3556.566667 | 314 | 17.628891 | 0.446104 | 0.056143 |
| Aleksandar Mitrović | Newcastle United | Forward/Midfielder | 2369.350000 | 191 | 10.255506 | 0.389556 | 0.053694 |
| Olivier Giroud | Arsenal | Forward | 2593.000000 | 229 | 12.111880 | 0.420389 | 0.052890 |
| Enner Remberto Valencia Lastra | West Ham United | Forward/Midfielder | 1127.033333 | 69 | 3.552482 | 0.283686 | 0.051485 |

# Pressure

       The next section of my analysis is focused on the defensive side of the ball. It is in this area of the game where I believe that Leicester City excelled the most. To play a direct style of football with this much success you need to be able to consistently thwart the opposition's attack time and time again, especially when your team ranks in the bottom 5 in ball possession.

       The first statistic that I measure within this section is pressure. All football fans know that it is much easier to create offense when you are given time and space. Pressure forces the attacking team into more challenging positions, can stymie attempts at playing dangerous passes, and force mistakes that give the ball away and create counterattacking opportunities. Leicester City were the third best team in total team pressures, only trailing Liverpool and Aston Villa.

       Midfielders Danny Drinkwater and N'Golo Kanté led the team in pressures by a wide margin. Both players averaged between 21-24 pressures per game which was about 5 more pressures per game than the next highest player Marc Albrighton. Those three players mentioned finished within the top 25 players by total pressure count with Kanté and Drinkwater also finishing in the top 25 for pressures per 90.

       Of course, it is not simply enough to measure team and individual pressure counts. I wanted to determine which locations Leicester City pressured the most. I once again created a heatmap to visualize this and it is apparent that Leicester City pressured the opposing players the most when they had the ball on the flanks within the midfield and the attacking third of the field. Of course, this heatmap only takes into account the total pressure numbers. It does not normalize for locations which are more prone to pressures such as the area in front of goal. In Figure 33, I created a heatmap for all 20 Premier League teams where each bin is normalized based on the league average for each bin. This heatmap provides an

accurate visualization of where each team pressured the ball compared to the other teams in the league. We can see from this display that Leicester City pressured the ball frequently near the 4 corner flags, particularly the left defending corner flag. As we would expect, the team also ranked above average in all three bins on the flanks. This shows that Leicester City were opportunistically pressuring the ball in all three areas of the pitch. And if the ball was close to either touchline, they were a good bet to pressure the ball.
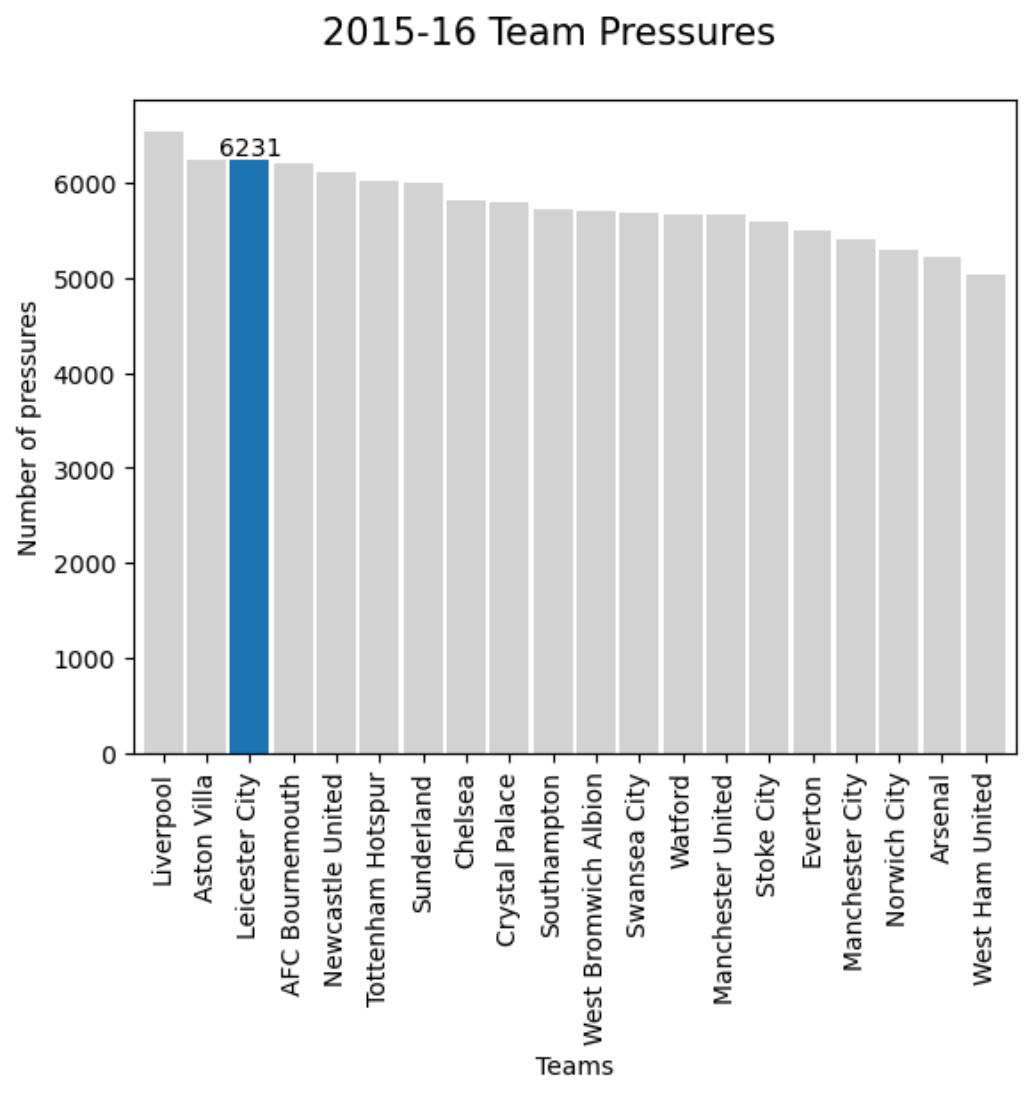
Figure 28:

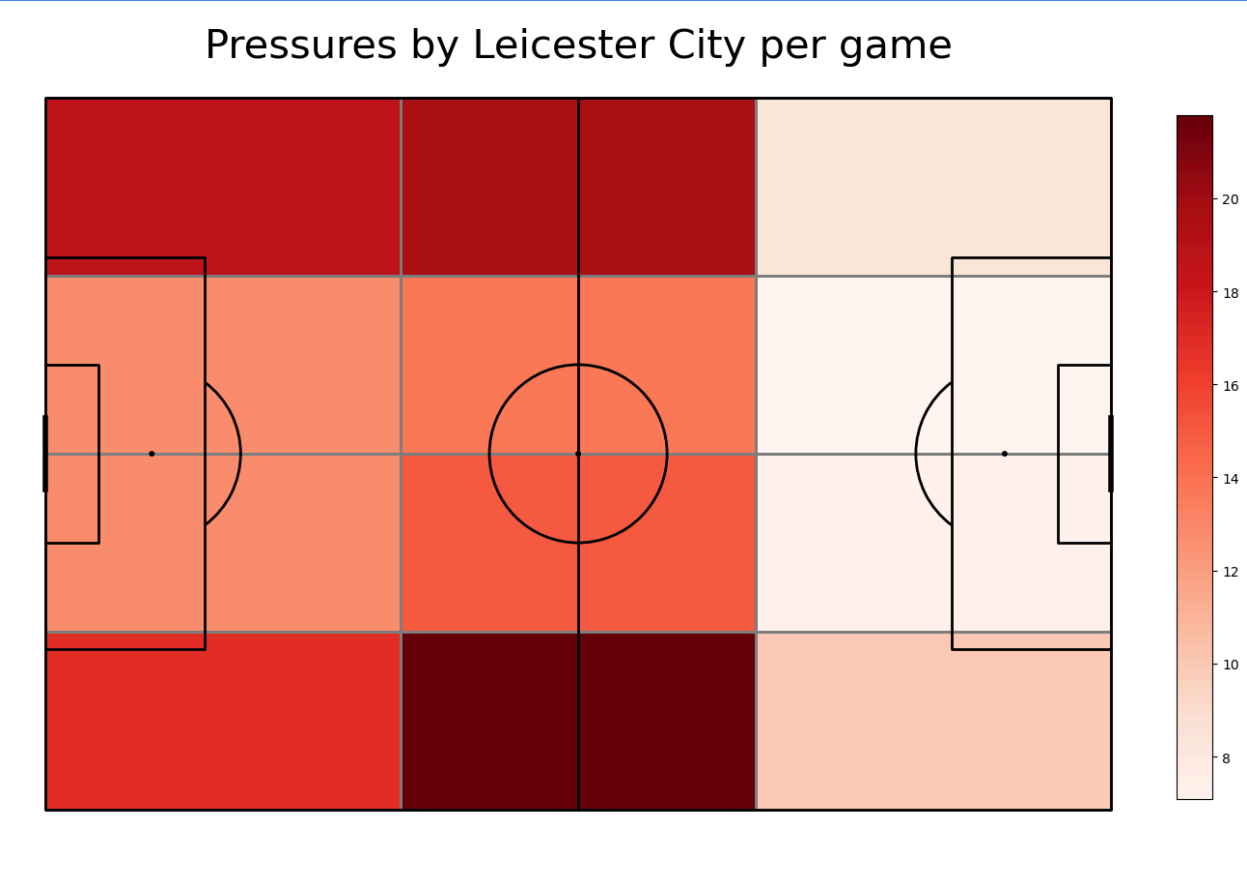Pressures by Leicester City per game
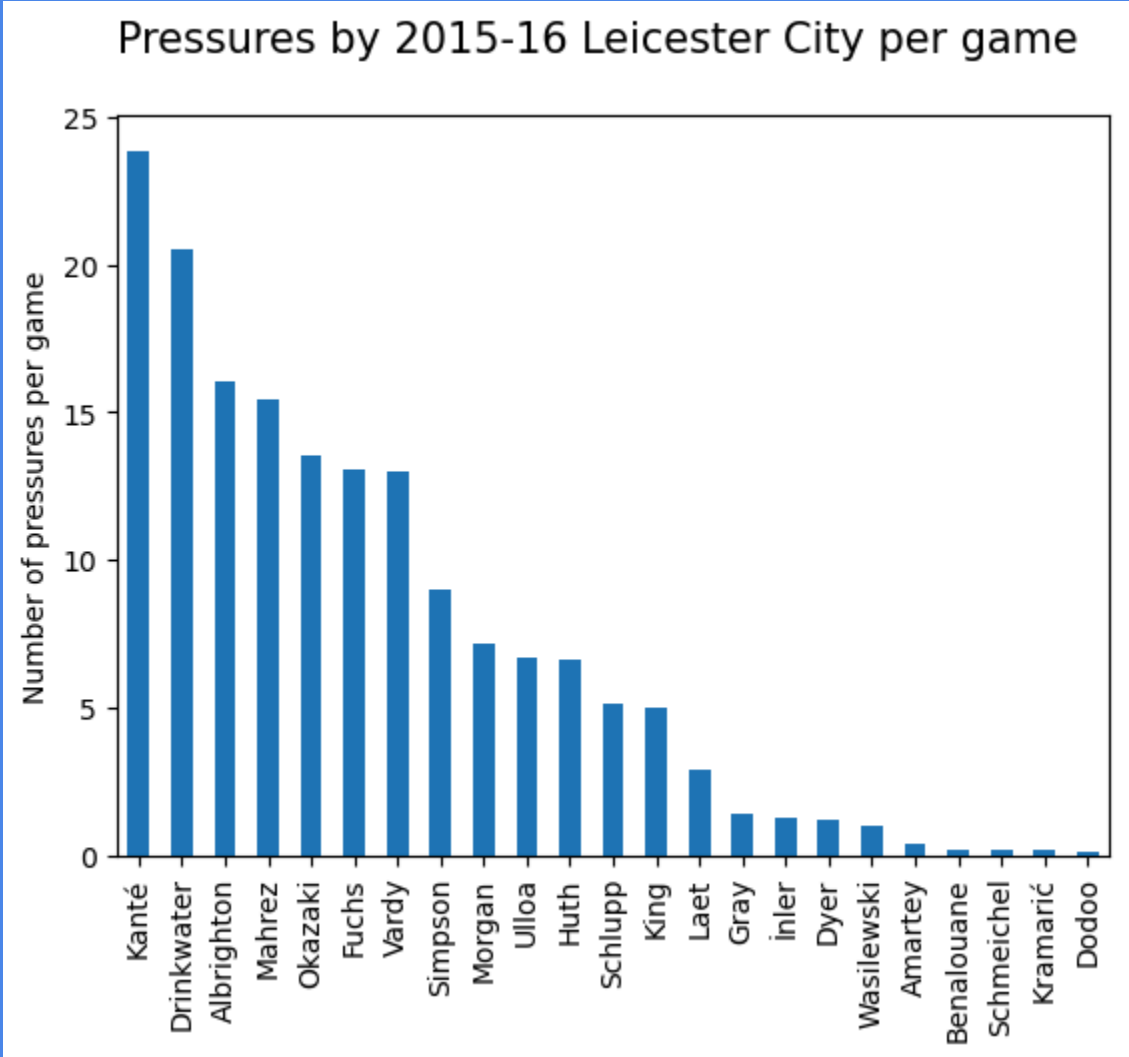
Pressures by 2015-16 Leicester City per game

Figure 31:



Top 25 Players by Pressure Counts

Figure 32:



Top 25 Players by Pressures per 90 Minutes
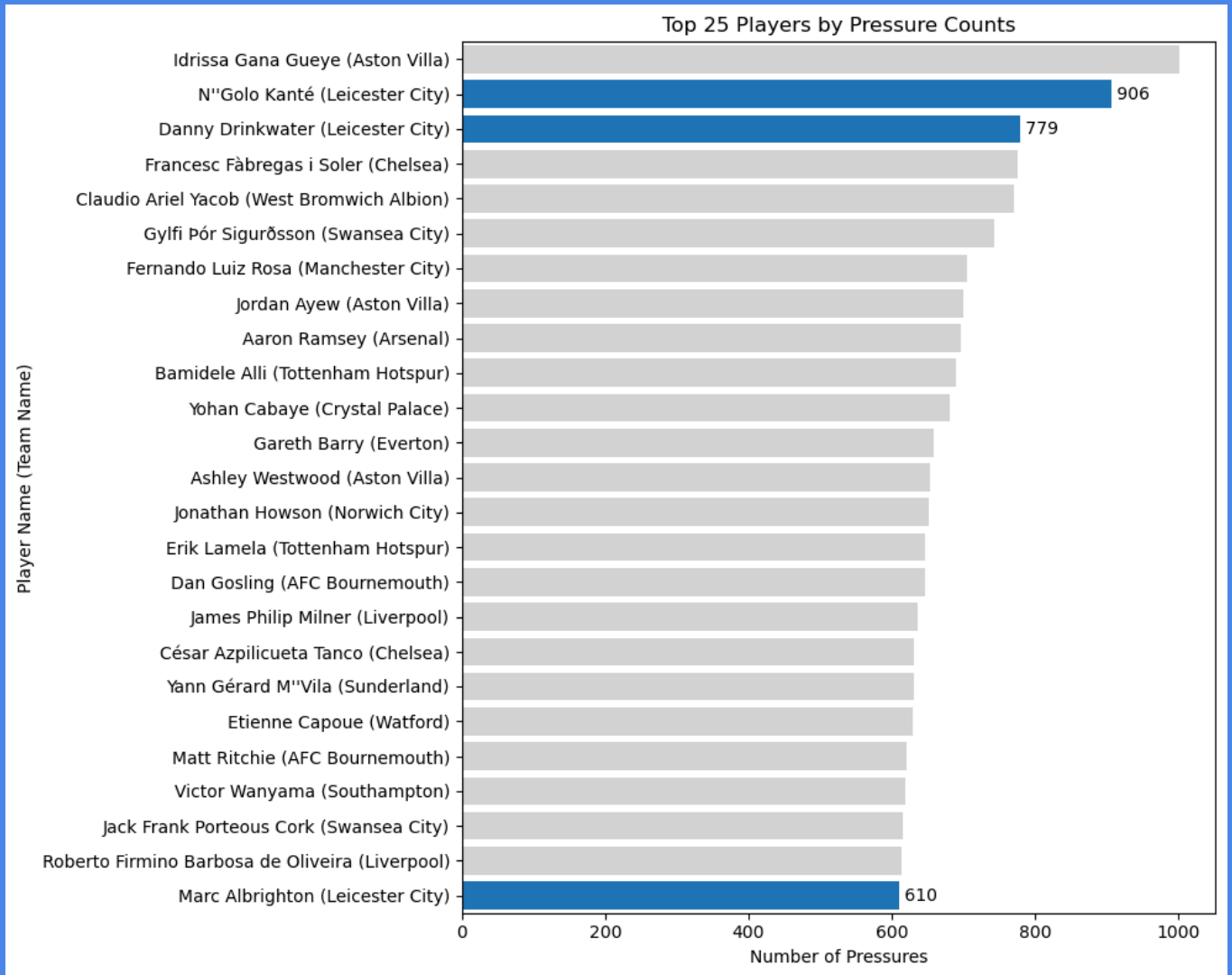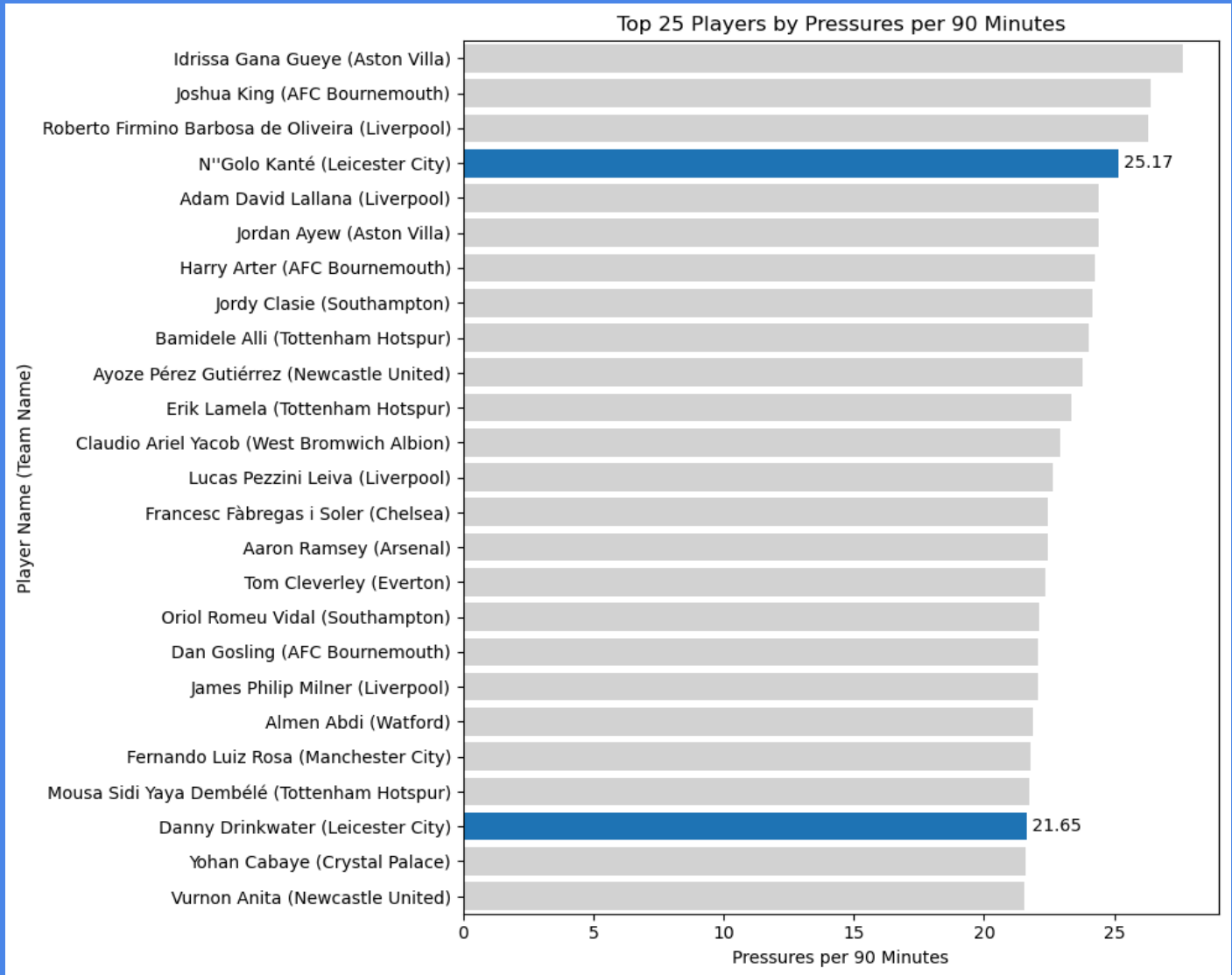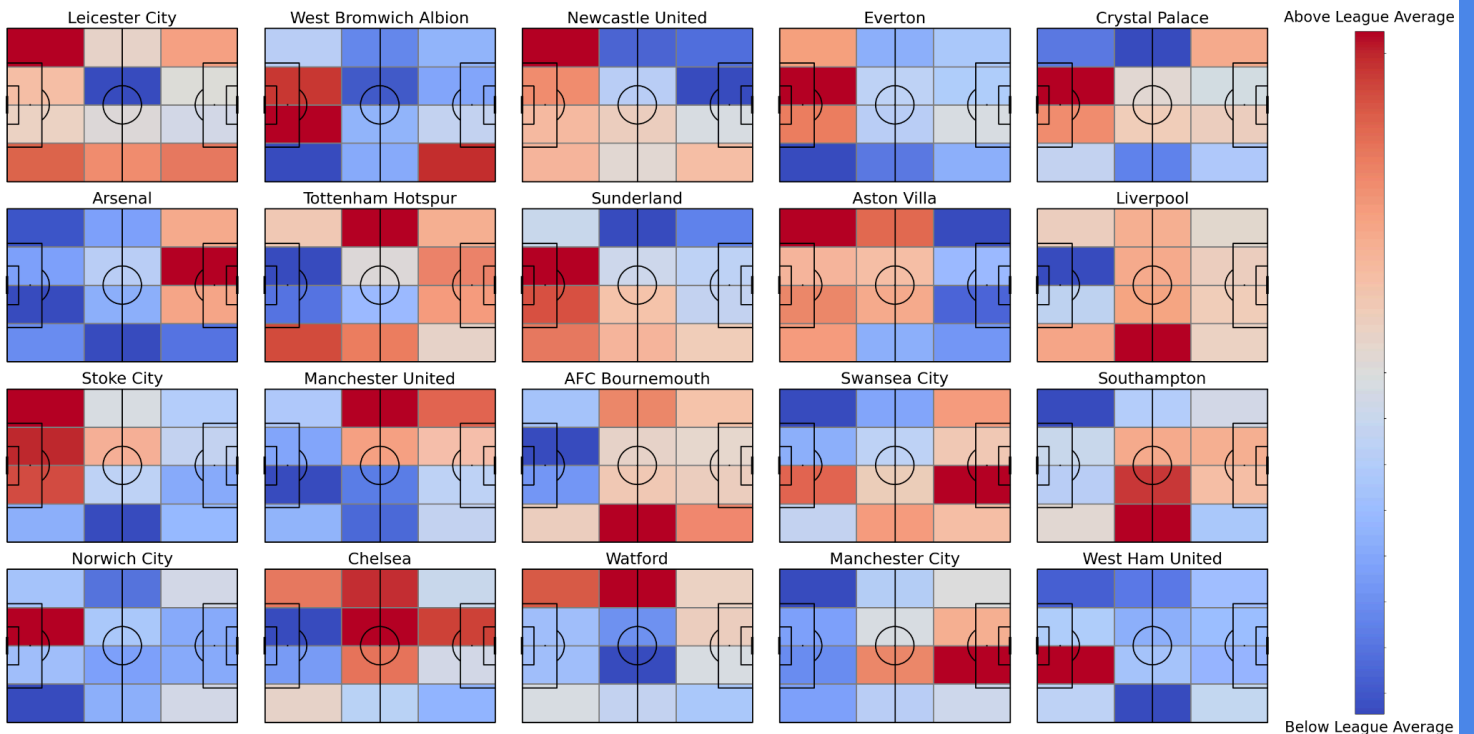
Figure 33:



Team Pressures -
Performance Above Zone Average (15-16' EPL Season)

# Passes Allowed per Defensive Action (PPDA)

Now that we know the areas Leicester City pressed the most, I wanted to get a better idea of how aggressive they were when the opponent had the ball. Passes allowed before defensive action (PPDA) is a great metric that can provide us an idea of just that. This statistic measures how many passes the other team completes within their attacking 60% of the pitch before a pressure, tackle, duel, or foul. Teams with a high average PPDA typically focus on their defensive structure and allow the opponents more time and space.

The philosophy behind this style of defending is to allow teams to complete non-threatening passes while ensuring that they do not complete passes or dribbles that break down their structure and lead to high danger scoring chances. Leicester City rank near the middle of the pack in this statistic which suggests that they were methodical in when they would apply pressure and attempt to win the ball back. This strategy makes sense as an optimal one since committing to an aggressive press is taxing on your squad throughout the course of the season. As we saw earlier, Leicester City largely kept the same players on the pitch which means that they played a lot of minutes. To accomplish this, the players would have had to be in tip top shape and also extremely prepared to avoid injuries.

Figure 34:



Average Passes Allowed Before Defensive Action per Team
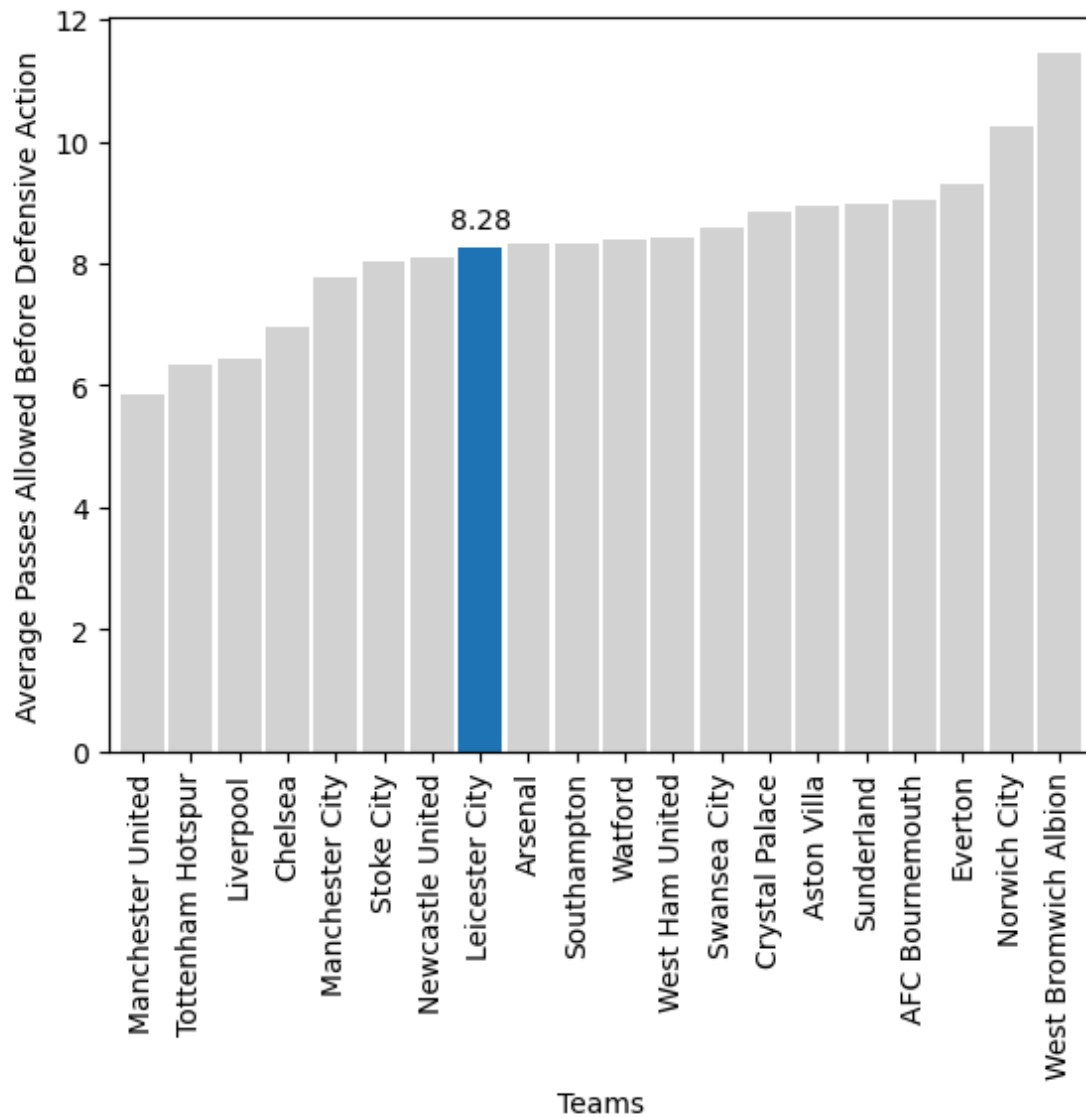
# Counterpress

Staying on the topic of pressing, one of the most important metrics in modern football is the renowned counterpress or gegenpress metric. This style of pressing gained notoriety with Pep Guardiola's Barcelona teams of the late 2000s and early 2010s and later became a staple of Jurgen Klopp's Borussia Dortmund and Liverpool teams. The philosophy behind counterpressing is to press extremely aggressively oftentimes with multiple players immediately after losing the ball to try and win it back. This type of press is extremely effective when executed properly since the pressing team can oftentimes win the ball in dangerous areas. Another advantage of counterpressing is that it can quickly stimy any attempts of an opponent counterattack. This is because time and space is typically required to play incisive passes leading to a break. By quickly placing the ball carrier under pressure, the counterpressing team essentially eliminates these passing options even when conceding lots of space in behind.

For simplicity, I named this metric immediate possession regains since many readers are not familiar with counterpressing and simply want to view the visualizations. Leicester City finished 4th among all Premier League teams in immediate possession regains with 12.71 per game. That season, counterpressing was a major driver of success as perennial top 6 contenders Liverpool, Tottenham, and Manchester City were the teams that bested them in this metric .

Figure 35:



2015-16 Immediate Possession Regains Per Game
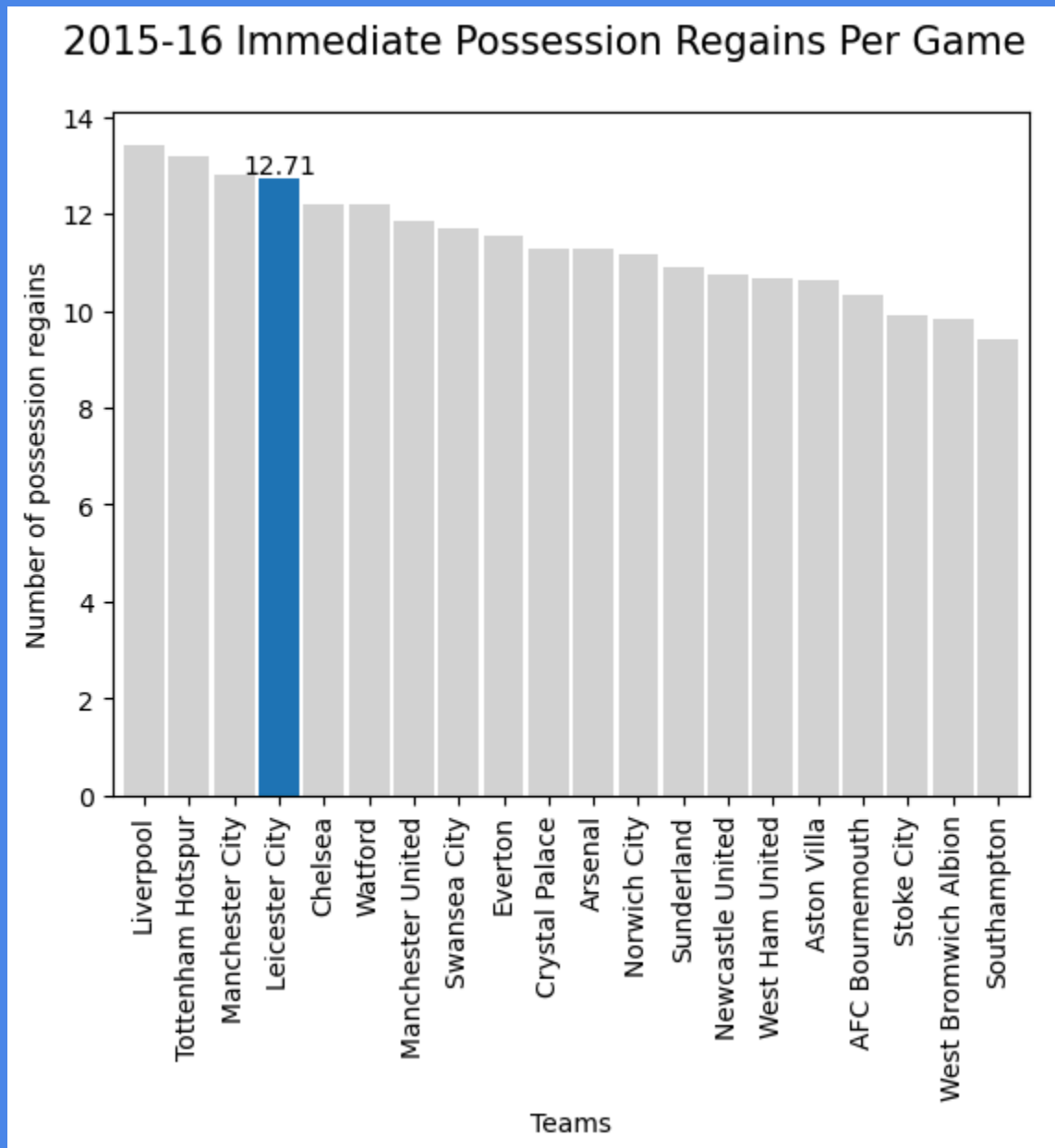
By looking at the heatmap in Figure 36, it can be seen that Leicester City were the most effective at counterpressing in the attacking midfield area, specifically, on the right side of the midfield. Regaining the ball in these areas can be a major driver of success and there is a trend since most of the teams who finished in the top half of the table did well in regaining the ball in these areas shortly after losing it.

Figure 36:



Immediate Possession Regains -
Performance Above Zone Average (15-16' EPL Season)
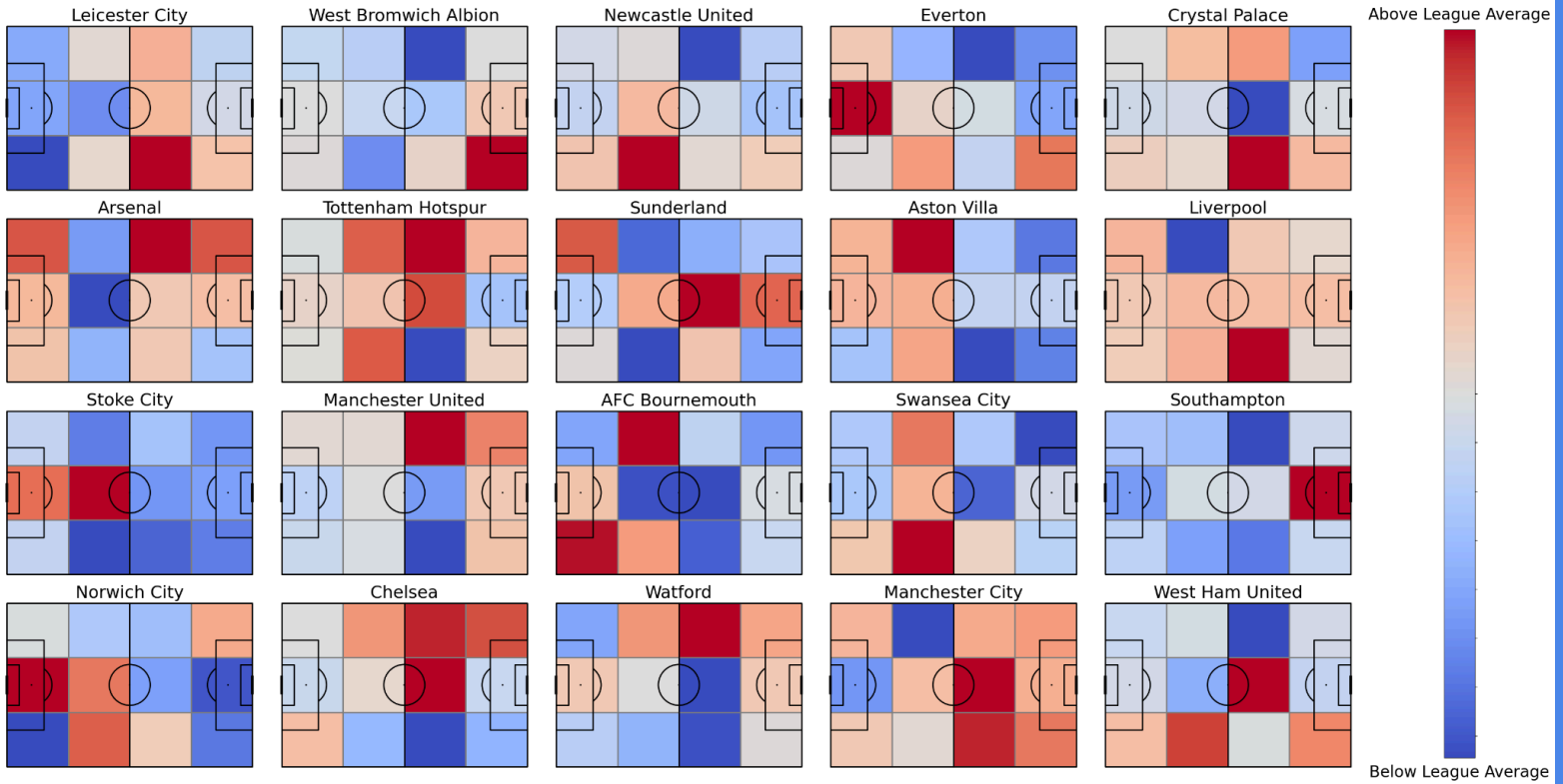
# Defensive Actions Analysis

Next, I wanted to determine which players contributed the most on the defensive side of the ball. To do this I created my own points system for defensive actions that players performed on the pitch. I separated these actions into three groups. The first group of actions were awarded 2 points per action. These actions are: Ball Winning Tackles and Interceptions, Recovery Passes, and Ball Recoveries. These actions were awarded the two points per action (the most) since they not only stopped an opponent's attack but also recovered possession potentially leading to a counterattack. The second group of actions were awarded 1 point per action. These actions are: Pressures, Disruptive Tackles, Disruptive Interceptions, Clearances, and Blocks. These actions are awarded one point instead of two because while these actions are extremely valuable in disrupting an opponent's attack, they do not win the ball back for the defending team. Lastly, the third group is only comprised of one action called Dribbled Past. This action is awarded -1 point since it is a negative outcome for a player to dribble past you. With these groups of actions defined, I summed up every player in the Premier League's points that season based on all the actions they were involved in. The results are shown below in Table 10 .

Impressively, both N'Golo Kanté and Danny Drinkwater ranked in the top 3 of this list for all players in the Premier League that season. This reinforces the notion that those two players were the best defensive midfield pairing in the league that season as they were the best at both regaining possession of the ball and disrupting the opponent's attack. Christian Fuchs also made this list as the right back finished with an impressive 1587 points.

Table 10:

**Top 25 Players by Defensive Ranking**

| Player | Team | Ball Recoveries | Blocks | Clearances | Disruptive Interceptions | Pressures | Recovery Passes | Disruptive Tackles | Ball Winning Tackles and Interceptions | Dribbled Past | Total Points |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N''Golo Kanté | Leicester City | 270 | 114 | 77 | 32 | 906 | 196 | 62 | 180 | 59 | 2424 |
| Idrissa Gana Gueye | Aston Villa | 265 | 83 | 50 | 17 | 1001 | 177 | 53 | 163 | 45 | 2369 |
| Danny Drinkwater | Leicester City | 256 | 74 | 72 | 10 | 779 | 202 | 34 | 102 | 64 | 2025 |
| Claudio Ariel Yacob | West Bromwich Albion | 190 | 89 | 92 | 23 | 770 | 178 | 39 | 113 | 77 | 1898 |
| Yann Gérard M''Vila | Sunderland | 218 | 73 | 102 | 21 | 630 | 203 | 37 | 116 | 73 | 1864 |
| Glenn Whelan | Stoke City | 228 | 87 | 105 | 29 | 568 | 188 | 31 | 80 | 62 | 1750 |
| Andrew Surman | AFC Bournemouth | 193 | 65 | 82 | 26 | 539 | 264 | 20 | 60 | 47 | 1719 |
| Erik Pieters | Stoke City | 156 | 96 | 124 | 37 | 599 | 172 | 59 | 97 | 56 | 1709 |
| Gareth Barry | Everton | 173 | 79 | 88 | 15 | 659 | 174 | 36 | 91 | 52 | 1701 |
| Daley Blind | Manchester United | 146 | 73 | 150 | 23 | 541 | 210 | 46 | 89 | 34 | 1689 |
| César Azpilicueta Tanco | Chelsea | 118 | 102 | 123 | 34 | 631 | 180 | 64 | 89 | 39 | 1689 |
| Etienne Capoue | Watford | 211 | 62 | 56 | 18 | 629 | 152 | 31 | 107 | 52 | 1684 |
| Fernando Luiz Rosa | Manchester City | 169 | 61 | 43 | 11 | 705 | 148 | 37 | 111 | 60 | 1653 |
| Francesc Fàbregas i Soler | Chelsea | 176 | 73 | 23 | 10 | 776 | 126 | 50 | 91 | 70 | 1648 |
| Victor Wanyama | Southampton | 195 | 50 | 82 | 19 | 618 | 156 | 31 | 82 | 37 | 1629 |
| Eric Dier | Tottenham Hotspur | 116 | 71 | 96 | 15 | 602 | 233 | 34 | 75 | 38 | 1628 |
| Simon Francis | AFC Bournemouth | 146 | 58 | 213 | 23 | 403 | 212 | 45 | 101 | 33 | 1627 |
| Mark Noble | West Ham United | 214 | 68 | 26 | 21 | 603 | 184 | 45 | 73 | 79 | 1626 |
| Jack Frank Porteous Cork | Swansea City | 178 | 73 | 73 | 17 | 615 | 152 | 28 | 102 | 46 | 1624 |
| Yohan Cabaye | Crystal Palace | 179 | 60 | 21 | 31 | 681 | 124 | 46 | 114 | 58 | 1615 |
| Christian Fuchs | Leicester City | 113 | 115 | 152 | 39 | 497 | 192 | 30 | 105 | 66 | 1587 |
| Chris Smalling | Manchester United | 122 | 58 | 242 | 22 | 413 | 225 | 26 | 72 | 16 | 1583 |
| Jonathan Howson | Norwich City | 162 | 71 | 72 | 14 | 651 | 140 | 27 | 79 | 60 | 1537 |
| Ben Watson | Watford | 121 | 74 | 90 | 10 | 608 | 201 | 23 | 78 | 68 | 1537 |
| Aaron Ramsey | Arsenal | 212 | 57 | 31 | 11 | 696 | 95 | 31 | 78 | 76 | 1520 |

Figure 37:



Top 25 Premier League Players by Defensive Ranking
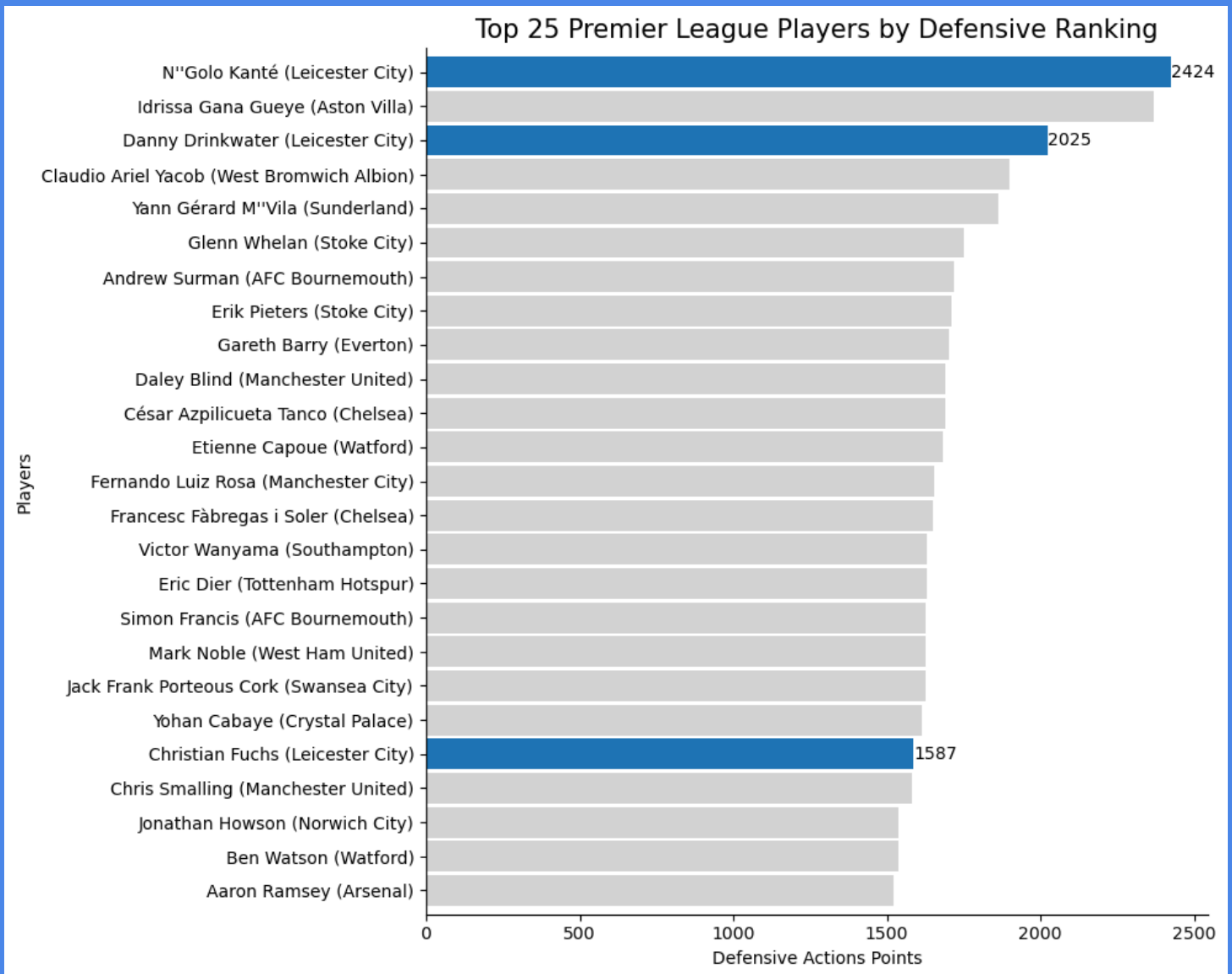
# Goals Saved Above Expected

Finally we arrive at the true last line of defense, the goalkeeper. As we know, statistics aimed at measuring the performance of goalkeepers has improved significantly over the past few years. Gone are the days of simply using goals against, clean sheets, or even save percentage to measure a goalkeeper's performances. With the implementation of xG models, we can now determine the quality of chances a team gives up and the difficulty of shots a goalkeeper faces each match. With the inclusion of xG we can now measure a goalkeeper's performance using a statistic called saves made above expected. This statistic is measured by first summing up the xG of all shots on target and subtracting the total xG value by the goals against. For the sake of simplicity, this statistic is included under the column xG - GA. I only included goalkeepers who played a minimum of 1500 minutes for this analysis.

For this statistic, Leicester City goalkeeper Kasper Scmeichel ranked in the middle of the pack, slightly worse than the median goalkeeper on the list. This means based on this measurement, Kasper Schmeichel did not perform better than the average goalkeeper the season that Leicester City won the EPL title. A strong case can be made that the team defense contributed more to Leicester's success in keeping the ball out of the net than the goalkeeper. However, it must not be understated that oftentimes goalkeepers are largely judged by making timely saves. With Leicester City winning a majority of their matches, Kasper Schmeichel must be given credit for making the saves when he needed to for the team to achieve their results.

Table 9:

## Top Goalkeepers by xG - GA (min. 1500 Minutes Played)

| Goalkeeper | Team | Minutes Played | GA | xG | xG - GA |
|---|---|---|---|---|---|
| Fraser Forster | Southampton | 1735.216667 | 17 | 21.294025 | 4.294025 |
| Petr Čech | Arsenal | 3258.483333 | 28 | 31.375825 | 3.375825 |
| David de Gea Quintana | Manchester United | 3257.916667 | 31 | 32.532919 | 1.532919 |
| Thibaut Courtois | Chelsea | 2231.433333 | 27 | 28.171215 | 1.171215 |
| Heurelho da Silva Gomes | Watford | 3615.250000 | 47 | 48.022038 | 1.022038 |
| Vito Mannone | Sunderland | 1840.500000 | 23 | 23.442239 | 0.442239 |
| Jack Butland | Stoke City | 2990.866667 | 37 | 37.365942 | 0.365942 |
| Hugo Lloris | Tottenham Hotspur | 3549.683333 | 32 | 31.891103 | -0.108897 |
| Simon Mignolet | Liverpool | 3282.500000 | 41 | 40.130652 | -0.869348 |
| Asmir Begović | Chelsea | 1515.200000 | 24 | 23.069915 | -0.930085 |
| Tim Howard | Everton | 2412.916667 | 35 | 34.069227 | -0.930773 |
| Joe Hart | Manchester City | 3314.200000 | 34 | 32.726179 | -1.273821 |
| Adrián San Miguel del Castillo | West Ham United | 3102.683333 | 37 | 35.601389 | -1.398611 |
| Kasper Schmeichel | Leicester City | 3668.533333 | 36 | 34.016099 | -1.983901 |
| Maarten Stekelenburg | Southampton | 1637.200000 | 19 | 16.151643 | -2.848357 |
| Łukasz Fabiański | Swansea City | 3570.150000 | 46 | 42.596387 | -3.403613 |
| Costel Fane Pantilimon | Sunderland | 1646.750000 | 32 | 27.595703 | -4.404297 |
| Wayne Hennessey | Crystal Palace | 2792.083333 | 35 | 30.398459 | -4.601541 |
| Glyn Oliver Myhill | West Bromwich Albion | 2218.666667 | 29 | 23.345490 | -5.654510 |
| Artur Boruc | AFC Bournemouth | 3088.033333 | 51 | 45.050360 | -5.949640 |
| Rob Elliot | Newcastle United | 2019.783333 | 36 | 29.845479 | -6.154521 |
| Bradley Guzan | Aston Villa | 2701.133333 | 55 | 48.650780 | -6.349220 |
| John Ruddy | Norwich City | 2613.116667 | 44 | 36.117969 | -7.882031 |

# Player Radar Plots

To finish off this analysis, I included the player radar plots for the consensus three most important players for Leicester City that season. The first plot displays Jamie Vardy's per 90 stats in percentiles compared to the forwards in the Premier League that season. Jamie Vardy was in the upper echelon for non-penalty expected goals and goals while also ranking above average in air duels and assists among forwards. Conversely, Jamie Vardy ranked below average in the other statistics, suggesting that he was objectively one of the best finishers in the Premier League that season who's strengths were utilized well within Leicester City's system.

The second radar plot displays the statistics for Riyad Mahrez. He was elite for his position in generating goals and assists, ranking in the 92nd and 91st percentile respectfully among wingers. Interestingly, Mahrez ranked above average for non-penalty expected goals and danger passes but nowhere near elite. This suggests that Mahrez and Vardy were among the very best in converting their chances into goals. Riyad Mahrez also ranked in the 98th percentile among wingers for completed dribbles. Since there is more emphasis on the winger position to be creative in taking on the opponent's defenders and beating them in 1v1s, Riyad Mahrez was in a league of his own that season in terms of creating chances and threatening the opponent's final third.

Finally, I analyze N'Golo Kanté who was elite among midfielders in most of the defensive statistics I analyzed. Kanté impressively ranked in the 99th percentile in ball recoveries, 98th percentile in ground duels won, 97th percentile in pressures, and 92nd percentile in recovery passes. Basically, Kanté was one of if not the very best midfielder at pressuring and winning the ball back for their team. While he did not contribute much directly in attack, his ability to read when to press and execute his challenges to win the ball back were invaluable in spearheading his team's attacks, putting his attacking teammates in a great position to succeed.
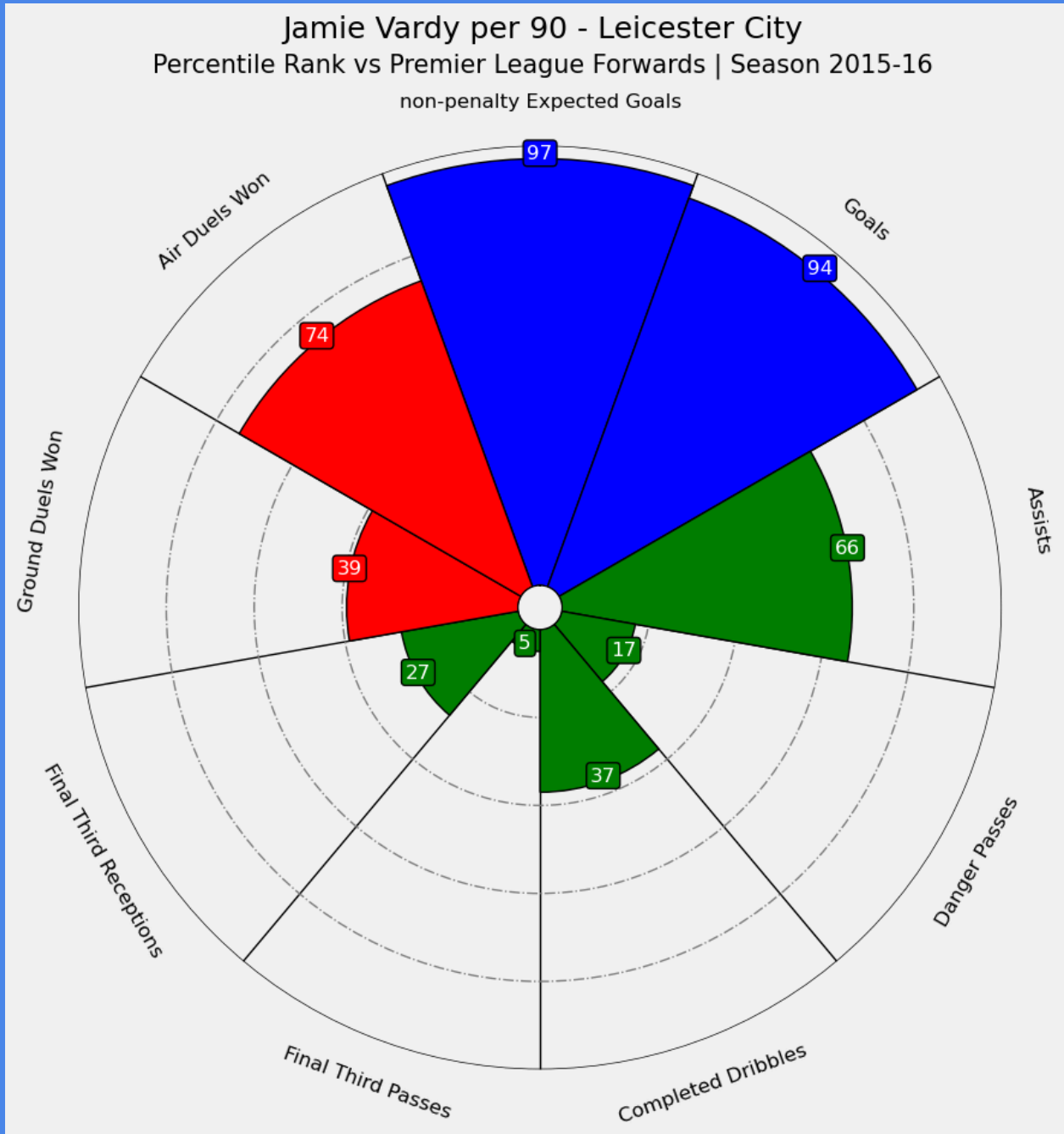
Jamie Vardy per 90 - Leicester City
Percentile Rank vs Premier League Forwards | Season 2015-16

Riyad Mahrez per 90 - Leicester City
Percentile Rank vs Premier League Wingers | Season 2015-16

Figure 40:



N"Golo Kanté per 90 - Leicester City
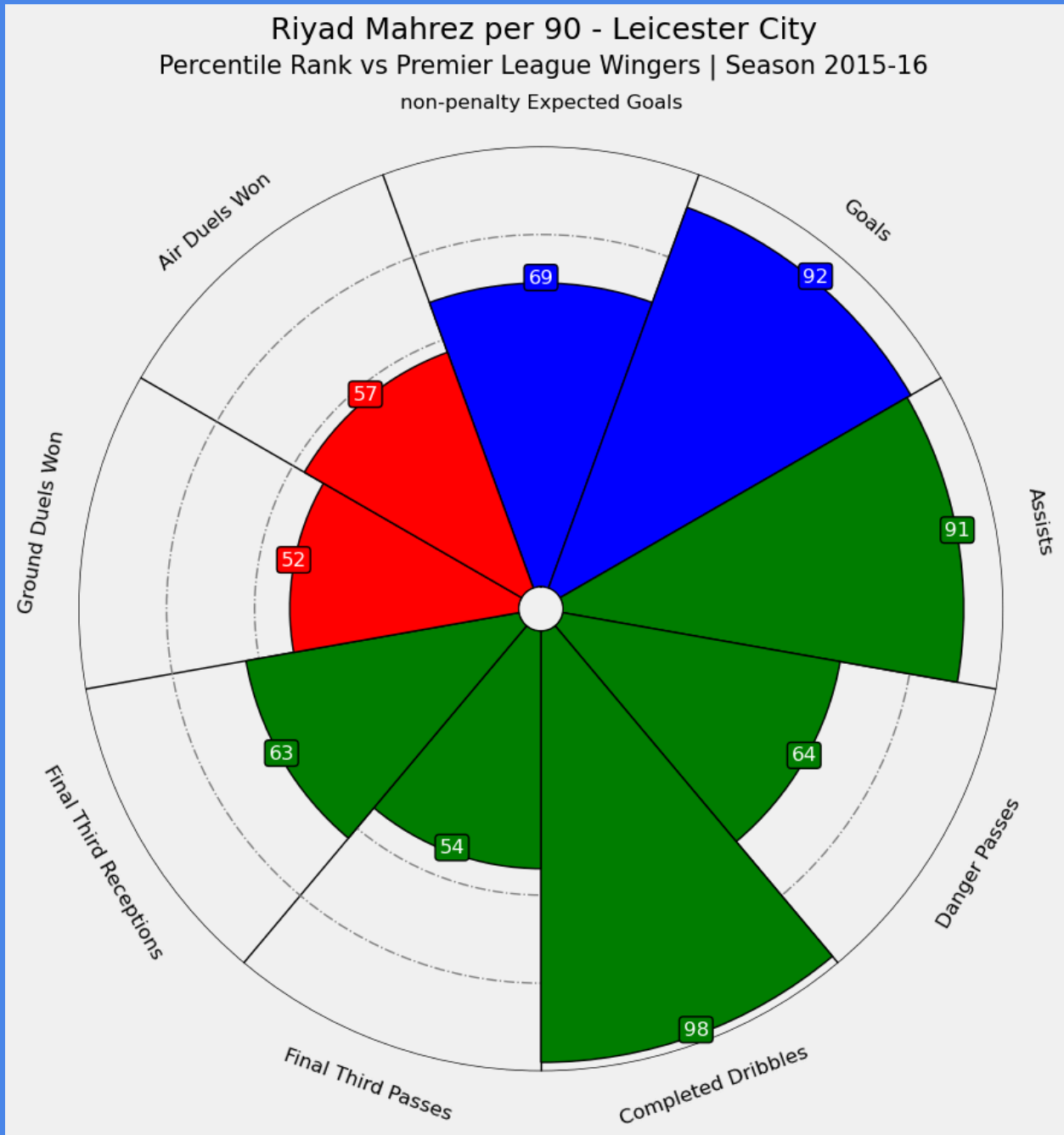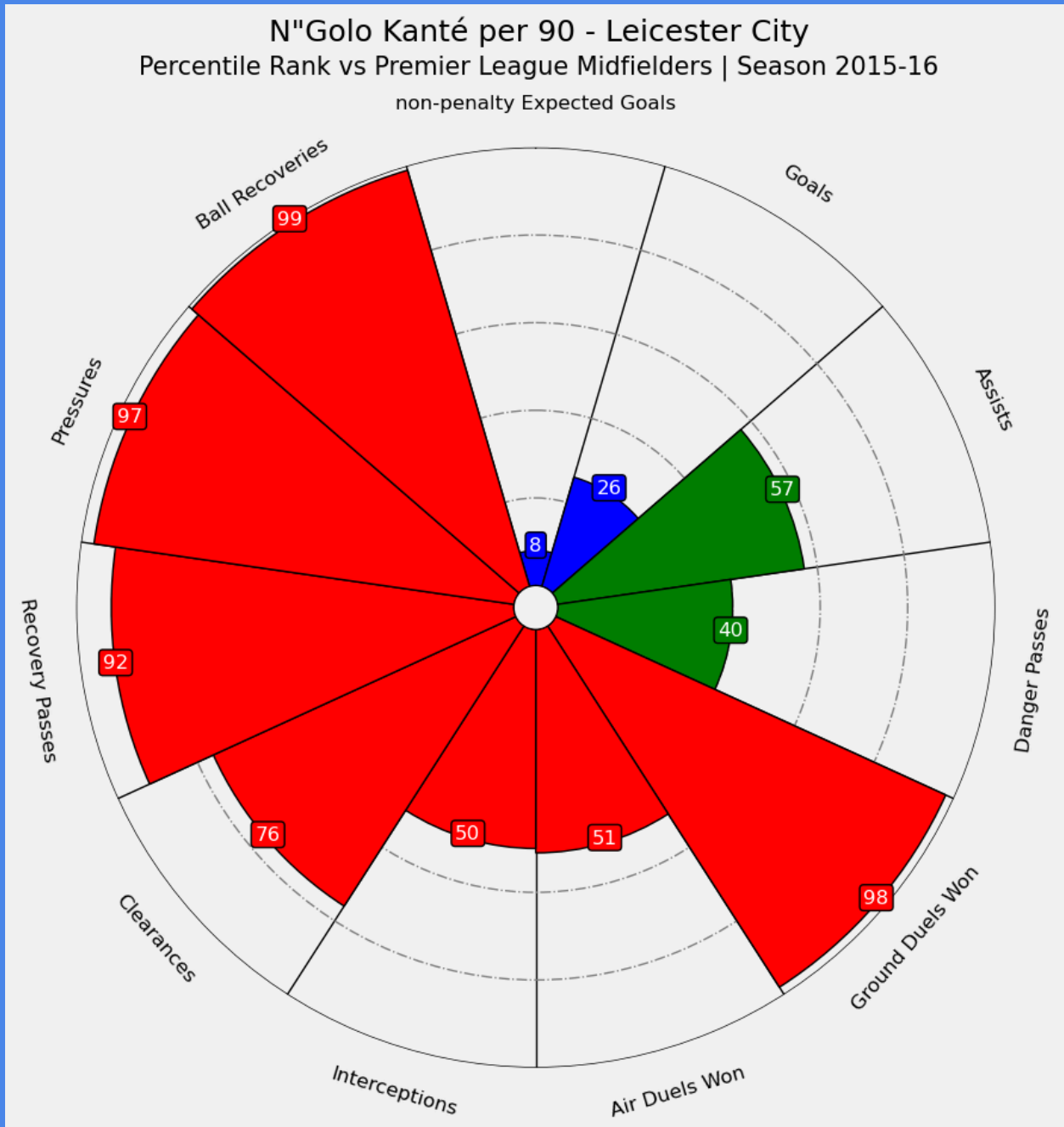Percentile Rank vs Premier League Midfielders | Season 2015-16
non-penalty Expected Goals

# Conclusion

      2015-16 Leicester City were able to defy all the odds and win the EPL title in their second season post promotion. However, once I started to dig deeper and paint a picture as to how they were able to accomplish this feat, I realized that this team achieved their success in an extremely unconventional fashion. Relative to previous Premier League champions, this team won the title without retaining possession of the ball, instead hitting their opponents with a flurry of counterattacks and dangerous long balls in behind. To commit to playing this direct style of football requires the perfect blend of discipline and commitment as well as elite defensive players and dynamic clinical attackers. It just so happened that this squad had all of the ingredients needed to successfully play this style, win the elusive EPL Title, and capture the hearts of so many football fans.

      The fact that all of these factors came together for Leicester City to capture this level of success really shows how rare such a feat is in the EPL. It is highly unlikely we will witness a team like this achieve this level of success in our lifetime and I believe we must cherish them and implement some important lessons, both in our own football careers if we have one and furthermore our own lives. No matter who you are or what your background is, with commitment, discipline, and heart, you can accomplish feats that no one believes were even possible, even if your strategy is bold and unconventional.

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