Module 2. Data Analysis

BARÇA INNOVATION HUB
Universitas

Module 2. Data Analysis

References

Download

Module 2. Data Analysis

To develop analyses about the game with the greatest possible depth, it is essential to have data as an ally. What we perceive and see is very important, but it is also necessary to contrast and question it with something that is objective and neutral. Because data is always neutral; what varies—and this is where we will focus most of the explanation—is the way it is used, not the number itself. In this second module, the goal will be to explain the importance of advanced statistics in game analysis, how to use it to break or create opinion narratives, and how to hybridize data with what one sees, because balance is the key to everything. We will add examples, both collective and individual, that will allow us to generate content later on.

There is a famous phrase from Spanish coach Juanma Lillo during a press conference when he was the national team coach that serves as a starting point. He referred to the role of statistics in football and how its influence can be interesting regarding the information it presents but, ultimately, statistics, as a hard science, cannot capture the most important aspects of the game. This analogy is defended by

many top-level coaches who shy away from statistics because they often see them as a reduction that does not reflect reality, but rather is perverse and shows something that is biased. Is that really the case?

In the last season, 2022/2023, Josep Guardiola talked about choosing Bernardo Silva as a right winger in the second leg of the Champions League round of 16 against RB Leipzig in March 2023. Silva is one of the smartest players there is, and Pep emphasized the following: "There are things that do not appear in the data. Bernardo is unique. He makes us play better, be more aggressive, and this does not show up in the data." Like Guardiola, many coaches speak of things that do not appear in the data, so we first need to define what they are. Most sports media have used data as a definitional tool: goals, assists, passes, crosses, recoveries. Sections with absolute figures that were thrown at the reader. With his statement about Bernardo Silva, Guardiola tries to distance the player from classic statistical categories because he does not stand out in terms of goals, assists, or recoveries. But this is not the debate we are interested in.

In this module, we will talk about advanced statistics. Commonly known as big data, though I will steer clear of this term to define it as advanced statistics, it is understood as a vast set of data, so much so that traditional systems are often inadequate for measuring them, and therefore it poses new questions and possible answers for which, not long ago, there were no solutions. In the world of football, there is

still a long way to go, as it is still under construction in many leagues and countries. Unlike leagues in other sports, such as the NBA or NFL, where advanced statistics are integrated into both the different teams that make them up and, what interests us, in the communicative spectrum surrounding them. They are more accustomed to discussing concepts that mix data with analysis, offering higher quality content.

Data for (Re)discovering the Collective

For journalists, data has a different utility than for those working within the football industry. The first thing to consider is that the better the question asked of the data, the greater the yield it will provide. In this sense, it has a fully active implication for the journalist, as it largely depends on the analyst's ability to extract good stories.

The first step is to understand some of the most important concepts that journalists face when they start using advanced statistics to explain what is happening. It is relevant to understand the concept and know that each provider defines them differently or has specific parameters for measuring each piece of data, so within this world, there will be few absolute data points, as they will depend on many factors. Starting from this premise helps avoid establishing axioms that do not fit reality.

Expected goals (from now on referred to as xG) have become particularly well-known in recent years on social media within the nerdy world that enjoys using statistics. What are they? Each model has its particularities, but basically, it takes into account the following factors: the distance of the player to the goal, the angle of the shot, the body part used to take the shot, and the type of pass prior to it. Based on all these concepts, a value between 0 and 1 is assigned to the shot, determining the probability of it resulting in a goal. Essentially, it allows measuring the quality of the shots. They are a very useful tool for measuring collective or individual dynamics in front of goal. I will develop this further later on. In this module, I will use data from the company StatsBomb, a benchmark within the industry, with a very precise model regarding xG.

xG is often misused in many analyses, and in this module, I will provide some examples of how they can be useful and how to use them to generate diverse content.

Let's take data (StatsBomb, n.d.) from the five major leagues to measure how many xG are generated on average per match this season 22/23:

- Bundesliga (1.22 xG)
- Premier League (1.20 xG)

- Ligue 1 (1.18 xG)
- LaLiga (1.10 xG)
- Serie A (1.08 xG)

What does this indicate? The average xG generated by each team in each of the leagues, providing a view of which competitions generate more potentially dangerous situations. At first glance, one might think that the Bundesliga and the Premier League are the most entertaining, and the data serves to contrast this information: in both, more xG is generated on average, indicating that there are more chances or that they are of higher quality. To know for sure, one would need to look at each team.

On the other hand, if we look at the average goals of each team, we see that Serie A surpasses LaLiga despite having fewer xG produced. What does this tell us? That there is lower effectiveness in LaLiga when it comes to converting chances despite generating more volume. The rest of the competitions maintain the same order.

- Bundesliga (53)
- Premier League (50)

- Ligue 1 (49)
- Serie A (44)
- LaLiga (43)

Just starting from this data, which is superficial, one could analyze deeper questions. How are chances generated in each league? Are there patterns in gameplay to know how goals are scored in each competition? Are there differences in each of the competitions? From a very simple data point, one can pull the thread to start generating debates around the same topic, expanding or not depending on individual interest.

Essentially, we are interested in xG for two main reasons: the study of teams and their dynamics, and the individual performance of players over time. The first allows us to know how a collective is performing based on what it generates and what it ends up converting, indicating whether the team is producing above or below expectations, provided there is enough context to analyze the data. It is very useful for highlighting trends and allowing the journalist to know whether, according to the data, they align with reality or not, and if they do not, to see the degree of deviation that exists to determine if changes might occur in a short period. The individual analysis enables us to assess whether a player is efficient based on

the types of shots taken, which finishing zones are frequented, and whether or not they are overproducing.

In the 2022/2023 season, FC Barcelona had the best defense in Europe and one of the best in LaLiga's history: only 18 goals conceded after 37 matches. What can xG contribute to this data? Context.

Figure 1: FC Barcelona Statistics

Barcelona

Shots Against Barcelona

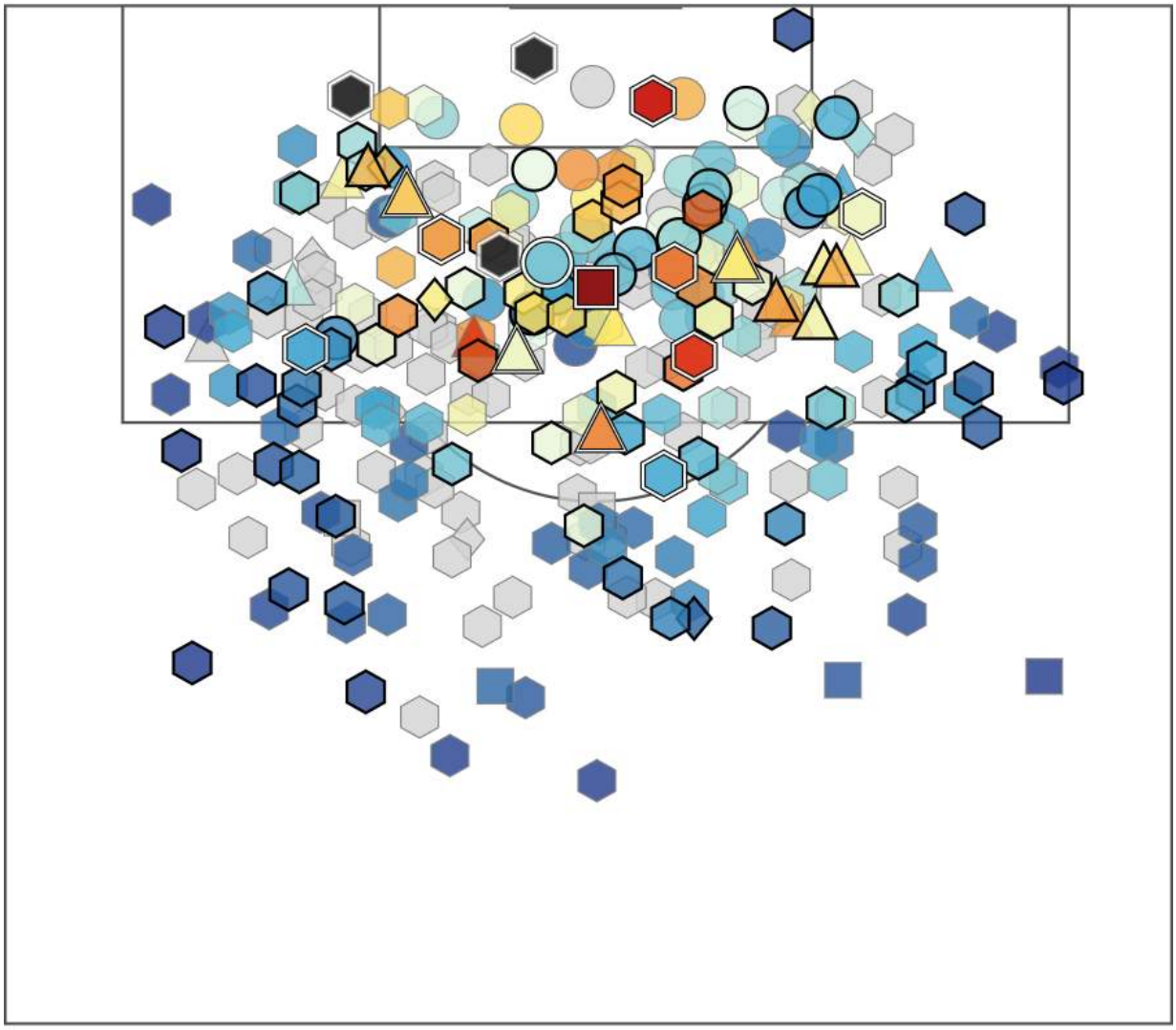
La Liga, 2022/2023

Exp. goals: 29.73 (15 goals / 318 shots)

+2.35 (3 goals / 3 penalties)

ExpG/shot (all except pens & OG): 0.093

ExpG/shot (open play only): 0.100



xG from set pieces	xG from open-play crosses	xG from throughballs	xG from dribbles	Other xG
4.47 (2/66)	6.72 (1/53)	4.30 (4/21)	1.35 (0/10)	13.58 (8/172)

StatsBomb

Source: StatsBomb, 2019, https://bit.ly/3sWn1Le

This is a typical shot map from StatsBomb, showing all the shots faced by FC Barcelona up to matchday 36 of LaLiga. They have faced 318 shots (the fewest in LaLiga), but what's interesting is to look at what advanced statistics reveal. The opponents have generated 29.7 xG (excluding penalties), but the incredible fact is that Barça has conceded (excluding penalties) just 15 goals! This is half of what, according to this model, the team should have conceded. This difference places them at the top of the five major leagues as the team with the largest differential between expected and actual goals conceded.

Here, we can start to use this data to ask questions. Is this difference between what opponents generate and what the team allows sustainable over time? What the data for FC Barcelona shows is that the team has had the best goalkeeper, one who has prevented many goals and reduced the opponents' chances. Is it therefore correct to speak of the best defense? It would be more accurate to refer to Barça as the most efficient, but one that has shown to depend excessively on individual performances. In contrast, Manchester City has minimized opponents more effectively but hasn't had that individual advantage.

Figure 2: Manchester City Statistics

Manchester City

Shots Against Manchester City

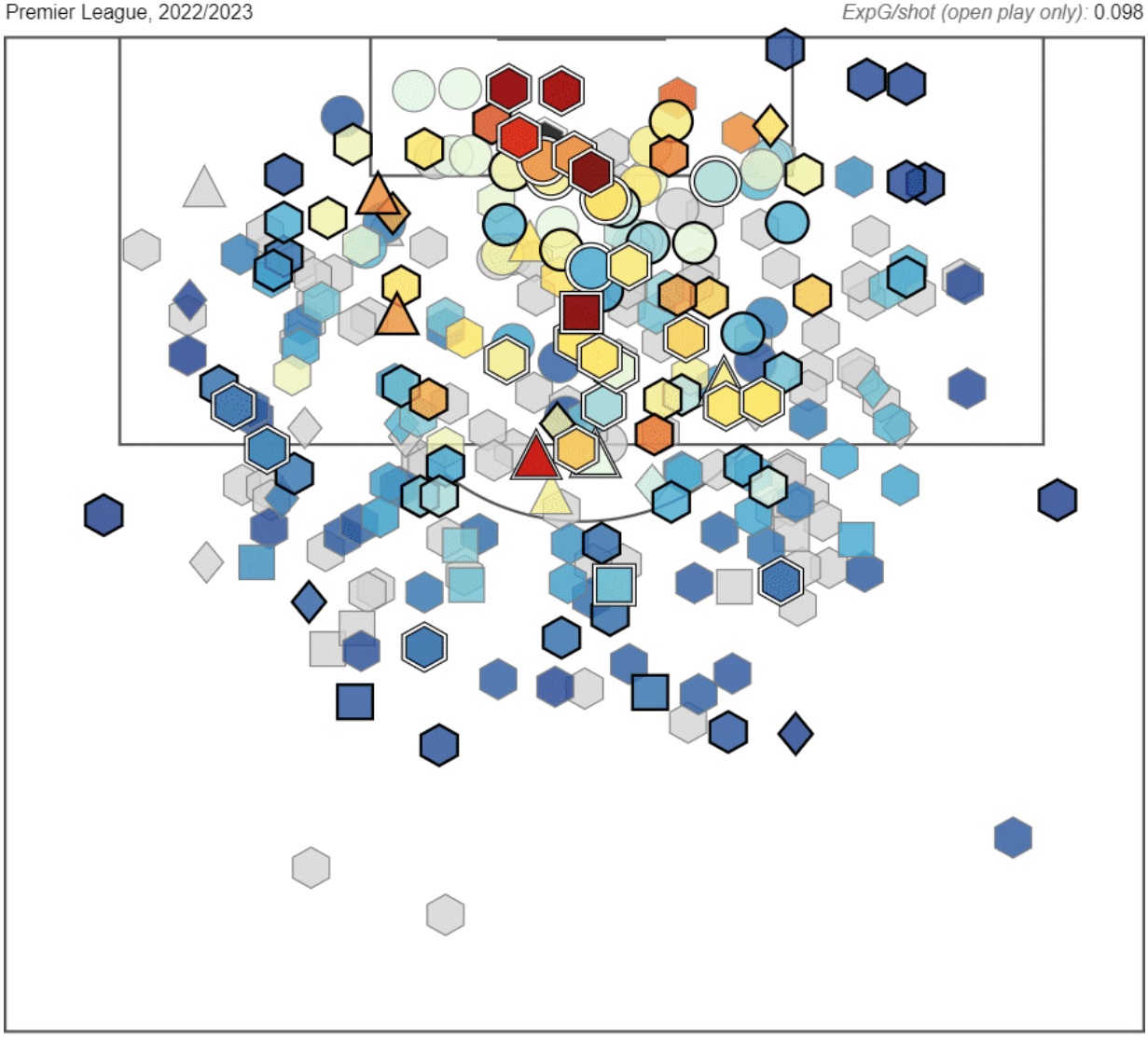
Premier League, 2022/2023

Exp. goals: 27.13 (29 goals / 283 shots)

+2.35 (3 goals / 3 penalties)

ExpG/shot (all except pens & OG): 0.096

ExpG/shot (open play only): 0.098



xG from set pieces	xG from open-play crosses	xG from throughballs	xG from dribbles	Other xG
7.44 (6/82)	6.36 (4/34)	2.11 (3/10)	1.21 (0/16)	10.23 (16/143)

freekick or penalty

from throughball

following a successful dribble

header

foot/other

goal *saved* *off target* *blocked* *own-goal*

low xG *high xG*

0 *0.1* *0.2* *0.8*

StatsBomb

Source: StatsBomb, 2020, https://bit.ly/3sQHCAU

This is the shot map against Manchester City, which has conceded (excluding penalties) nearly double the goals that FC Barcelona has in the Premier League: 28. That's 13 more than the Blaugrana. However, if we look closely at the shot chart, we see that City has shown a greater ability throughout the season to minimize shots from opponents (they have received 283 shots, 35 fewer than Barcelona) and have allowed less xG than Xavi's team: 27.1. Nevertheless, the league table indicates that City has conceded more goals, creating a direct association: they have been the worse defense.

On the other hand, xG is not as relevant when talking about a specific match to determine merit or establish the difference between the two teams based on what they have generated. Generally, teams with quality players tend to exceed their xG because they have footballers capable of converting more complex situations into goals more regularly. A team can win 2-0 having generated 0.8 xG, while the opponent generated more than 1 xG and still did not score any goals. This can have several interpretations that are not resolved by just looking at the data. How many shots did each team need? From further or closer to the goal? With more or less time to execute them? One can generate 0.8 xG with many low-quality shots and 1 xG with only two shots in front of the goalkeeper. The numbers won't reflect the dominance in the match.

And what happens if a cross is not converted despite the player diving in and being two centimeters away from making contact with the ball? Does it count as a chance? Is it measured in any way? It does not count as a shot, nor is it reflected in xG, so it has a value of zero. Therefore, the data, no matter how valuable it may be, has gaps and must be complemented by our perspective.

We must consider the entire context and not rely solely on the data; data alone often does not convey anything by itself, but needs a framework that gives it meaning and contains a narrative, a reason. The hybridization of data and analysis enriches content and adds value to the work, so the most complex task is knowing which data is relevant, and that can only be found by asking the right questions.

Data to Generate a Narrative

When we talk about players and their performances, statistics usually carry significant weight in the conversation and in generating specific narratives and states of opinion. They are often used to validate or discredit depending on the context. Data becomes dangerous when misused because it often generates portrayals of players that are far from reality, creating narratives that become ingrained in the collective imagination of fans. Just as with teams, the analysis of data regarding players must start from very specific questions, always considering the context in which that player operates, the league and its characteristics, the role they play in the

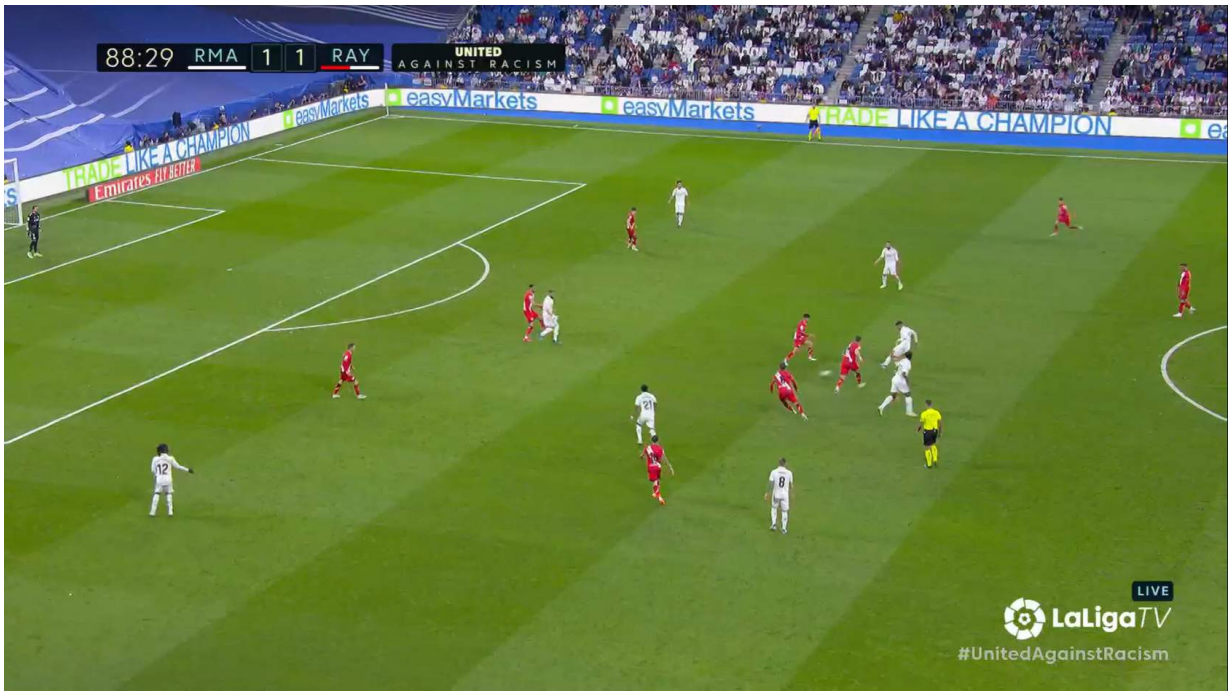
team, etc. A player cannot be transferred to another context without considering the variables to which they are subjected. This is perhaps the most complex part of data analysis when it comes to generating content.

One thing I find interesting is how to use data to dismantle prejudices that often pervade the media, misclassifying and labeling players inappropriately, which indicates a certain analytical laziness. For those narrating reality, it will always be easier to rely on familiar categories, as labeling a player provides security; data, when used correctly, should serve to blur boundaries and analyze in depth, avoiding superficial conclusions.

This season (2022/2023), Pedri González has provided one assist across all competitions. Playing as a central midfielder and often in advanced areas, this is a very low figure for a player of his profile. One could make a topic discussing this absolute figure and continue repeating phrases that have accompanied the player since his debut at Barça (that he only passes backward, that he lacks courage, etc.) or look beyond and see what lies behind that statistic. Why does he only have one? Where are his passes going? Does he break lines? Does he put his teammates in advantageous positions? Analyzing the game to ensure that the data tells a story rather than the other way around, using the first as a basis and the second as a complement that can enhance the game and its development.

If we analyze all the midfielders in the top five leagues this season, we will see an interesting statistic: Pedri is the third player (behind De Bruyne and Rodrigo de Paul) with the most xA overall, at 0.21 per 90 minutes, according to StatsBomb (n.d.). Expected Assists measure the number of assists a player should have based on the quality of the shots they create; that is, the higher the shot quality, the greater the likelihood of providing an assist. It is not a definitive statistic, as a perfect assist will have a high value, but it won't tell us the difficulty of the pass or how the play developed. However, this data is very useful for understanding the player's impact in generating goal-scoring situations—a measure of quality, though not effectiveness, because the final gesture depends on the teammate.

Figure 3: Moment of Dani Ceballos' pass to Rodrygo Goes for the Brazilian's goal against Rayo Vallecano.



Source: Wyscout, https://platform.wyscout.com/app/?

Image of the moment of Dani Ceballos' pass to Rodrygo Goes for the Brazilian's goal against Rayo Vallecano. A pass that occurs from more than 35 meters away and, despite breaking a line of pressure, leaves his teammate far away. The xA for this pass is 0.04. This pass counts as an assist because Rodrygo's shot ends up in the goal. However, the journalist's job is to go beyond that. At the end of the season, when counting goals and assists, the numbers can present surprises. xA allows us to understand whether the player creates dangerous situations and, therefore, brings their team closer to scoring, beyond the assists they may provide. Are these figures transferable to another team and context? How much variability do they offer? If, instead of Rodrygo, a lower-quality player receives the pass, how many times would this pass count as an assist?

On the other side of the coin, we have Pedri. While Ceballos finished LaLiga with four assists, the Canarian has only provided one. What does the xA say? That Pedri (0.21) totals almost double that of Ceballos (0.11) per 90 minutes. This data allows us to put the impact of the players into perspective, distancing the player from statistical anomalies. Pedri having only one assist in LaLiga is not logical, as it does not indicate a deficiency in the player, but rather in the player finishing the play.

Figure 4: Moment of Pedri's pass against Betis, in a play that would end up going nowhere.

Source: Wyscout, https://platform.wyscout.com/app/?

Moment of Pedri's pass against Betis, in a play that would end up going nowhere, with no shot from the receiver, despite the quality of the pass (breaking two lines of play). This means that this delivery does not even count as a key pass (a pass that ends in a shot). It gets lost in the limbo. However, it is precisely these types of plays that the analyst must highlight to weigh in on something that is overlooked in the debate and remains buried under the misnomer of statistics.

Figure 5: Lewandowski controls the ball, preventing the pass from reaching De Jong.

Source: Wyscout, https://platform.wyscout.com/app/?

Lewandowski controls the ball, preventing the pass from reaching De Jong, who was in a legal position and much better placed to execute the shot. Like this action, there have been many throughout the season, and here the data adds value because it highlights a trend that is very relevant for analysis: whether he provides assists or not does not imply that the Canary is one of the best playmakers in Europe. Hence the paradox: raw data, taken out of context, serves to generate narratives depending on external interests, but it does not explain or account for what is happening.

Another important piece of data to measure the value of a passer is through balls (passes into space that send a teammate running behind the opponent's last defensive line): any pass that breaks the last line of the opponent so that a teammate can run into space. In a football environment that increasingly emphasizes exploiting spaces behind the pressure line, with teams pressing high against their opponents and others limiting receptions between the lines, having passes that bypass that entire structure is enormously valuable. Since the 2016/2017 season, we have looked at which players appear in the TOP 15 in this category to see what type of player usually dominates this statistic:

- Messi (5 seasons)
- Neymar (3 seasons)

- Di María (2 seasons)
- Verratti (2 seasons)
- De Bruyne (1 season)
- Dani Alves (1 season)
- Jonathan Viera (1 season)

There's no need to comment on the names to see the type of player we are referring to, nor their technical and creative level. Some of the best players of the last five years in the final third of the field appear here. Analyzing only the midfielders of the 22/23 season, the third player who makes the most through balls per 90 minutes is Pedri (0.51), only behind De Bruyne and Verratti. This means that the Canary also appears in a category that is not usually seen in a normal statistical sheet, but it serves to show what type of passes he typically makes, directly contradicting the discourse that Pedri does not have much influence on the final gesture.

Surely many of you have read or seen analyses that use the passing accuracy percentage as an absolute statistical value to analyze a player's performance. In most media, the distinction between success and a positive value is still confused, when by itself it indicates very

little. To give real value to this type of data, it is essential to ask the right questions so that it shows useful information for analysis.

Data does not show but rather guides. It offers a broad perspective, and it is the job of the person interrogating it to question it so that the image becomes more defined. If a center-back has completed 111/113 passes in a match, what does this data tell us? In reality, very little. It indicates that their team had a lot of possession and, therefore, the type of passes they had to make were mostly safe.

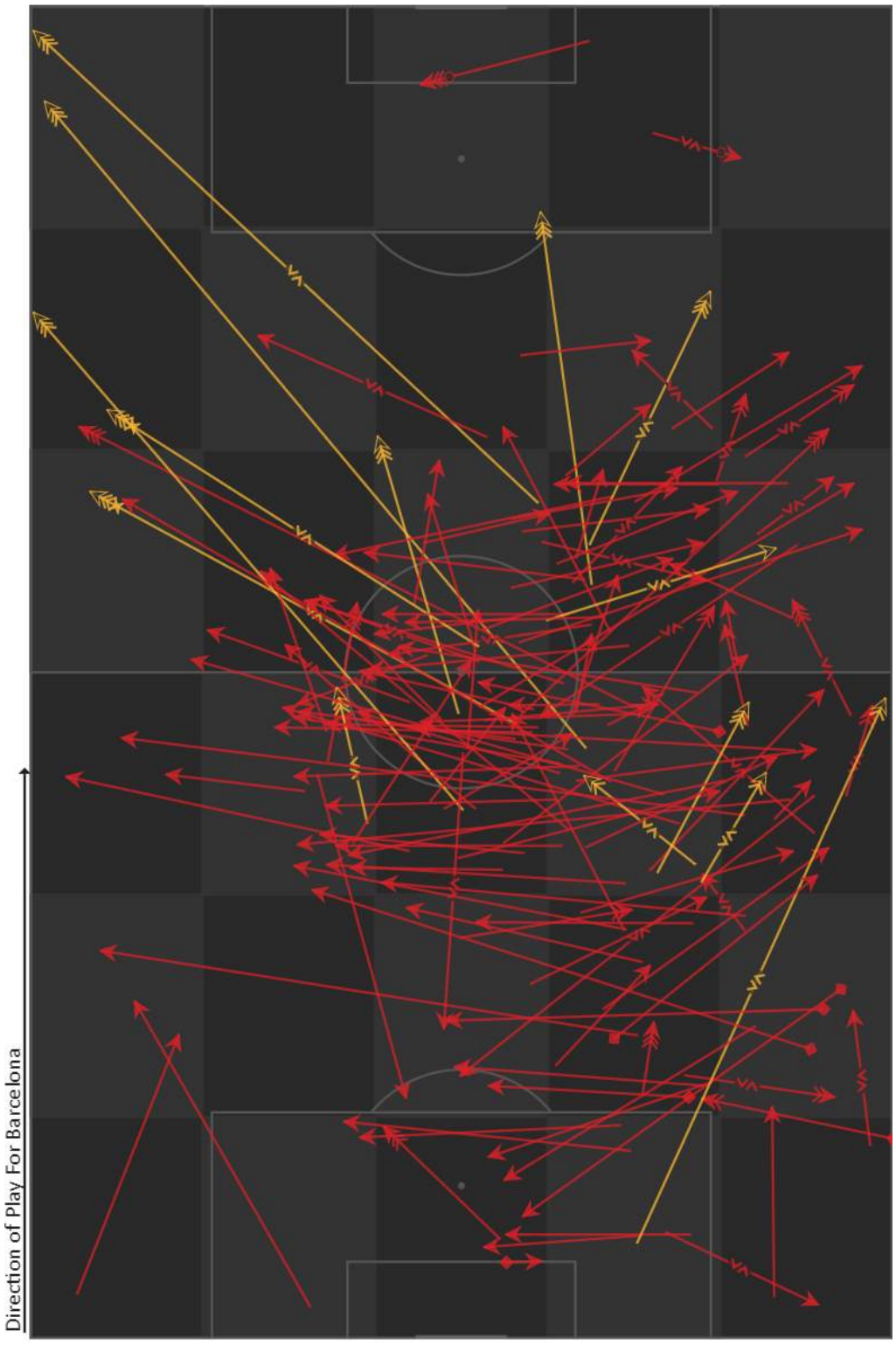
Figure 6: Ronald Araujo

Ronald Araújo

Barcelona

Events

2023-04-16 - 2023-05-02



StatsBomb

Source: StatsBomb, https://statsbomb.com/es/

This passing map shows all of Ronald Araujo's passes in the LaLiga match during the 22/23 season against Getafe (in red for completed passes and yellow for failed ones). The Uruguayan center-back completed 122 out of 130 passes, an exceptionally high figure. Can this be used as an argument for a possible improvement of the Barça center-back with the ball? To do this, it would be necessary to consider various key points to analyze the data and give it meaning. Of those 130 attempted passes, how many were vertical? How many broke through opponent lines? How many provided an advantage to the receiver? What options did the passer have?

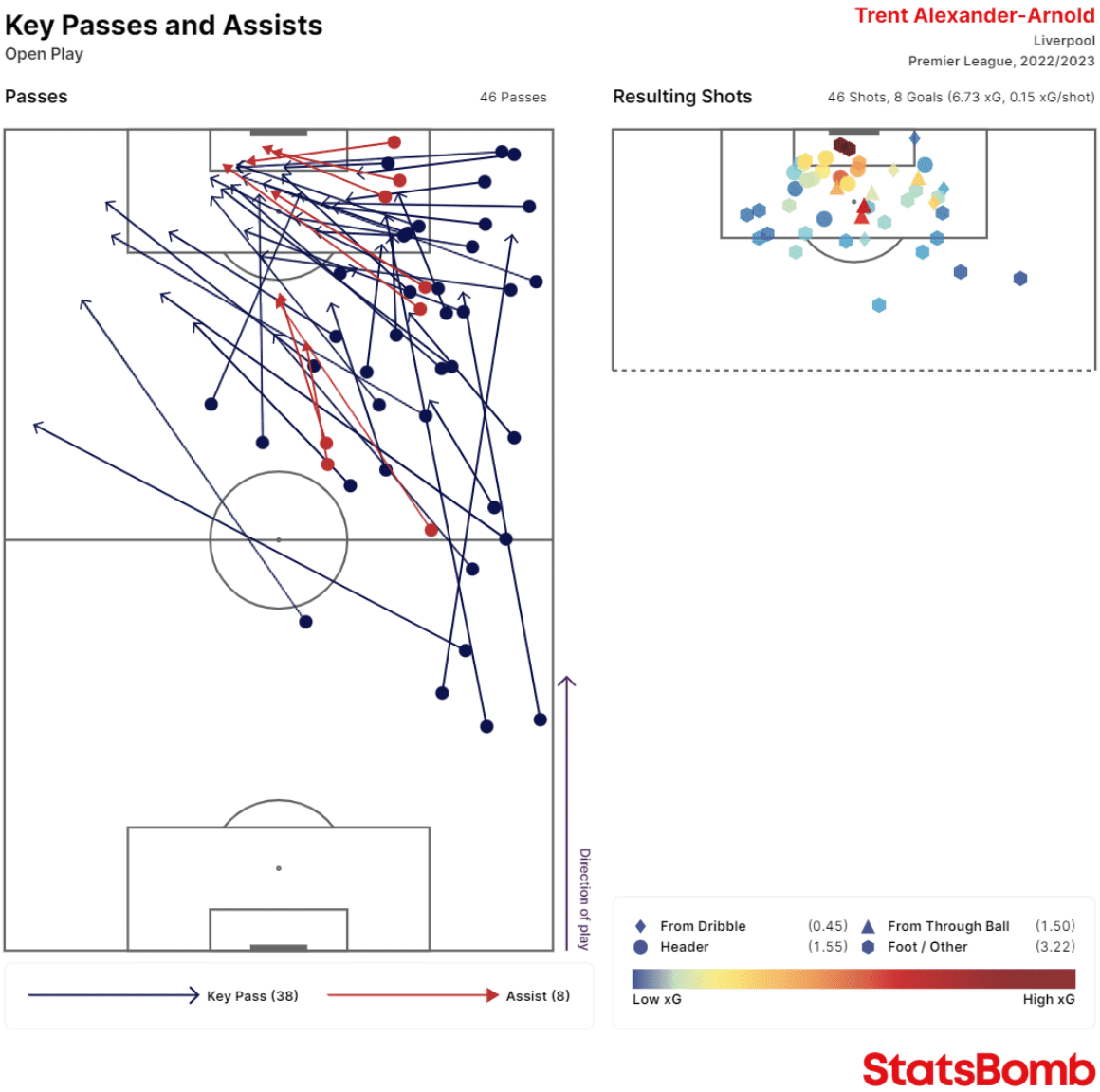
To that end, it's essential to emphasize two key concepts: eventing and tracking. The former refers to all the events that take place in a match, such as passes, shots, recoveries, etc., while tracking monitors the exact locations of all 22 players and the ball at all times, providing indispensable context for interpreting events. Will Spearman is an astrophysicist who has been working at Liverpool since 2018 in one of the world's most prepared data analysis departments. Since February 2023, following the departure of Ian Graham, Spearman has been the head of the department: director of research. The American astrophysicist designed a model in 2016 that revolutionized football and is related to tracking.

Spearman created Pitch Control, which, as he explained on the Liverpool website, "being a game of spaces, our idea is to know which areas are under a team's control at all times through tracking, to know how to close spaces or open them. It is the basic notion to understand how valuable space is. We call it opportunities to score without the ball." Pitch control, which can be found in video analysis tools such as MetricaSports or LongoMatch, allows one to see the relevance of space at all times, both with and without the ball.

If we return to the previously discussed passes from Ronald Araujo (which were eventing data), we can start to extract the true value of each pass because knowing the exact location of each player at the moment of the play allows us to determine whether the pass given was the best possible option. How? By taking into account the positioning of his teammates, knowing if the player was under pressure at the moment of the pass, if he was facing the goal or away from it, and a host of other data that provides context and, ultimately, sheds light on the data that is often presented to us as the most relevant.

Two years ago, StatsBomb launched a model called On Ball Value (OBV, hereafter) that measures the impact of different actions (passes, dribbles, shots, and defensive actions) in terms of scoring or conceding a goal separately. This model is very useful for genuinely assessing the impact of each action and delves into the details, which are what ultimately make the difference when discussing data.

According to OBV, the two players in the Premier League who add the most value from passing are two full-backs: Kieran Trippier and Trent Alexander-Arnold. Interestingly, these two players are below 75% passing accuracy, while the average for all full-backs in the Premier League is 78%. In other words, we are talking about two players with a high volume of interventions but with accuracy below the average, which is highly positive for both Newcastle and Liverpool.



Source: StatsBomb, https://statsbomb.com/es/

The type of passes that Arnold usually makes, which add the most value, are vertical passes, many of which come from areas far from the opponent's goal, with an accuracy rate around 50%. Klopp has often explained that he prefers a failed pass to a successful one, especially those that originate from the flank and move inward, because a failed pass leads to a second play, and Jürgen Klopp's Liverpool is extremely prepared for these situations.

Without considering the reasons behind this type of pass and its utility, even though they may be ineffective deliveries, analysis based solely on a percentage—however high—compared to other players in the same position, will lack depth. The same can be applied to Kevin De Bruyne, one of the best midfielders in recent years, who, despite playing for a possession-heavy and effective team like Manchester City, has one of the lowest passing accuracy percentages.

Since Pep Guardiola became the manager of Manchester City, his team has always led the league in passing accuracy among all Premier League teams. In a team that averages 88% accuracy, De Bruyne records just 74%, one of the lowest rates for a midfielder. In the Premier League, only three midfielders had a worse percentage than the Belgian in the 22/23 season: Soucek, Dramsgaard, and Jensen, players from West Ham and Brentford respectively, two teams

with low passing accuracy, which has a direct correlation with individual names. But not with De Bruyne.

The player himself has publicly stated that he never pays attention to that statistic and does not consider it important. De Bruyne has led the xA (expected assists) table for his team in five of the seven seasons he has played under Guardiola, meaning he is the player who generates the most volume and is the most valuable. Therefore, taking his passing accuracy percentage at face value without the surrounding context is meaningless; it generates a negative narrative that does not reflect the reality of the player.

Another interesting point to consider when analyzing a player is to adjust the data to his team's possession. Why? It is not the same for a player to make 2 successful tackles per match if his team has 47% possession as it is for another player to make 1.6 successful tackles with 64% possession. The second player has a higher record when we take into account that his team spends much more time with the ball. The same applies to other events like pressures, interceptions, or clearances—off-ball statistics that do not convey much without that context. It is logical that defensively, players on teams with significantly lower possession will have a higher volume in these data, but that does not imply that they are better in these areas, only that they have more opportunities to execute them.

Data analyst Jesús Lagos (@Vdot_spain on Twitter) is a prominent figure in generating content from data within the football world. In a Twitter thread (2022), he questioned a statistic that appeared on television during a match involving FC Barcelona: Gavi had run 13 km during the match, and Jesús wondered whether this was a lot or not, depending on many factors. At what intensity did he run? What was the context of the match? From the statistic, one goes back to the match and analyzes it, looking at each action and understanding whether the distance covered was necessary, if the kilometers were a result of poor positioning, etc. But, again, the statistic alone shows something that shines and is enticing, but once absorbed, it tells you little unless accompanied by the pertinent question.

Figure 7: Tweet by José Lagos

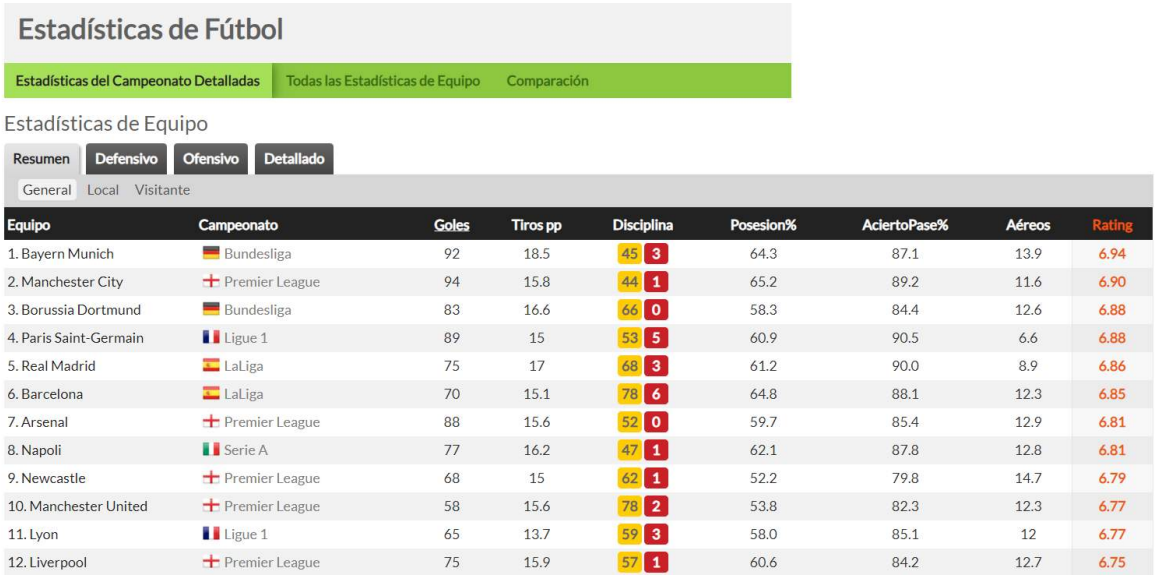
Source: Screenshot from Twitter (https://bit.ly/3Pv0LiS)

In this module, we are addressing the need to always question data and provide context so that it can generate a narrative and not just a headline. The latter may sell more, but the former is what should concern us. In a universe filled with headlines and eye-catching data used to praise or condemn at will, questioning the data becomes an

imperative necessity to create deeper content. Understanding that data does not generate added value on its own, and that it is each individual's mission to provide the necessary added value or context for its content to answer basic questions.

Tactical analysis, combined with the use of advanced statistics, gives another dimension to the work because it allows us to answer different questions in addition to delving into what the eye detects. It is a complement; it can never replace the diet but should help achieve more ambitious objectives, both when analyzing a team and a specific player. Where can you obtain the data? StatsBomb is a professional paid tool that works for many top-level clubs and various media outlets to provide greater depth in their content. However, it does have publicly available raw data that can be used as a testing ground. Most of the tracking data is paid, as it is very valuable, but most of the eventing data can be found on various platforms, one of which is Whoscored.com. There is also Sofascore.com, which offers eventing statistics from many competitions and is free.

Figure 8: Whoscored.com



Estadísticas de Fútbol

Estadísticas del Campeonato Detalladas | Todas las Estadísticas de Equipo | Comparación

Estadísticas de Equipo

Resumen | Defensivo | Ofensivo | Detallado

General | Local | Visitante

Equipo	Campeonato	Goles	Tiros pp	Disciplina	Posesion%	AciertoPase%	Aéreos	Rating
1. Bayern Munich	Bundesliga	92	18.5	45 3	64.3	87.1	13.9	6.94
2. Manchester City	Premier League	94	15.8	44 1	65.2	89.2	11.6	6.90
3. Borussia Dortmund	Bundesliga	83	16.6	66 0	58.3	84.4	12.6	6.88
4. Paris Saint-Germain	Ligue 1	89	15	53 5	60.9	90.5	6.6	6.88
5. Real Madrid	LaLiga	75	17	68 3	61.2	90.0	8.9	6.86
6. Barcelona	LaLiga	70	15.1	78 6	64.8	88.1	12.3	6.85
7. Arsenal	Premier League	88	15.6	52 0	59.7	85.4	12.9	6.81
8. Napoli	Serie A	77	16.2	47 1	62.1	87.8	12.8	6.81
9. Newcastle	Premier League	68	15	62 1	52.2	79.8	14.7	6.79
10. Manchester United	Premier League	58	15.6	78 2	53.8	82.3	12.3	6.77
11. Lyon	Ligue 1	65	13.7	59 3	58.0	85.1	12	6.77
12. Liverpool	Premier League	75	15.9	57 1	60.6	84.2	12.7	6.75

Source: Screenshot from Whoscored (www.whoscored.com)

Every year, the world of data analysis adds new tools and models, refines those already established, and discredits some that were thought to be untouchable. In an industry that advances so quickly, it is important to stay up to date and see what the latest innovations and trends are. Even if you are not a professional data analyst, these tools can be powerful assets that will assist you in your daily work when generating content.

CONTINUE

References

Lagos, J. [Vdot_Spain]. (11 de octubre de 2022). Se está hablando del partido de Gavi contra el Celta donde corrió más de 13km. El dato por sí solo no aporta mucho, necesitamos más información para saber si "es mucho o poco"Veamos unos datos de Gavi que son más importantes que esos 13km. https://t.co/JJdbTxJACN [publicación de Twitter]. https://twitter.com/Vdot_Spain/status/1579842579101016066

Statbomb (2022). Los mejores datos de fútbol. https://statsbomb.com/es/

StatsBomb (2019). La historia de los goles esperados (xG) y aplicaciones prácticas. https://statsbomb.com/es/articulos/futbol/que-son-los-goles-esperados-xg/

StatsBomb (2020). Why aren't Manchester City better? https://statsbomb.com/articles/soccer/why-arent-manchester-city-better/

CONTINUE

Download

PDF

module-2-data-analysis-a2sEyrGd.pdf

1.3 MB