



PORTFOLIO

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in 

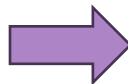


Analytical Content

Throughout this document, a set of analyses are presented as a sample of the work I have carried out to date – although I am in a constant process of research and learning – both in my personal and educational projects as well as during my experience in the context of professional football.

Providing Value with Data through:

- **Context Analysis**
 - Metrics Evolution
 - Exploring Metrics and adding context through Visualization
- **Performance Analysis (Pre & Post-Match):**
 - Defensive Situations
 - Buildup
 - Chances Creation
 - Transitions
- **Recruitment Analysis | Scouting**
 - Advanced Metrics & Rankings
 - Performance Evaluation
 - Segmentation Processes: Squad's Game Model & Player Roles
 - Similarity Algorithms on Players and Teams
 - Recommendation / Matching Systems



Set of Presentation Tools

- **Specific Reports and Presentations**
- **Interactive Dashboards on Visualization Tools:**
 - Power BI
 - Tableau
 - Streamlit
- **Recurrent Reports:**
 - Detailed reports of players included in a shortlist
 - Pre-Game Reports: opposition analysis
 - Post-Game Performance Analysis
 - Monthly / Last-five-games Performance Report



Implementation Cases

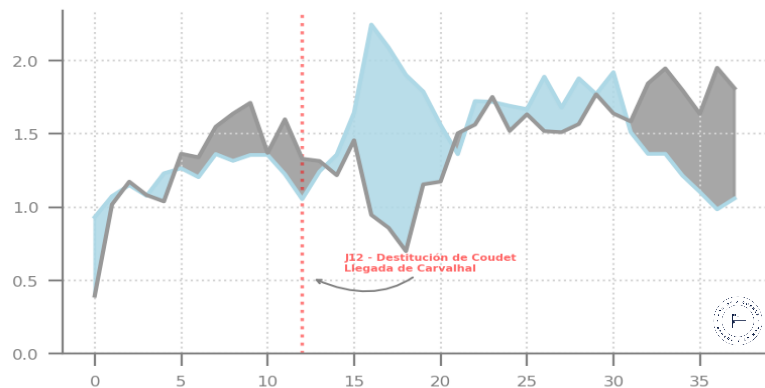
- Detection of personal strengths to impact match preparation through the study of playing patterns in both the own team and the opponent.
- Monitoring the team's evolution in key phases of the game for the execution of the playing model, based on specific indicators – e.g., % of Immediate Recoveries after Loss by Zone.
- Periodic identification of leaders, by competition and/or club, in specific metrics to feed and optimize the player tracking strategy or assess the team's performance in a particular area of interest.
- Detailed reports on the aggregated performance of players who are targets in the market.
- Objective identification of attainable profiles that would match to a specific tactical context, positional role and game model, reducing uncertainty in player acquisitions.
- Acquisition of players who can replace a potential sale, approaching their level and at a minimal economic cost.

Context Analysis | Metrics Evolution



Celta Vigo

xG A FAVOR vs. xG EN CONTRA | Media Móvil s/5 Partidos
LaLiga 22/23

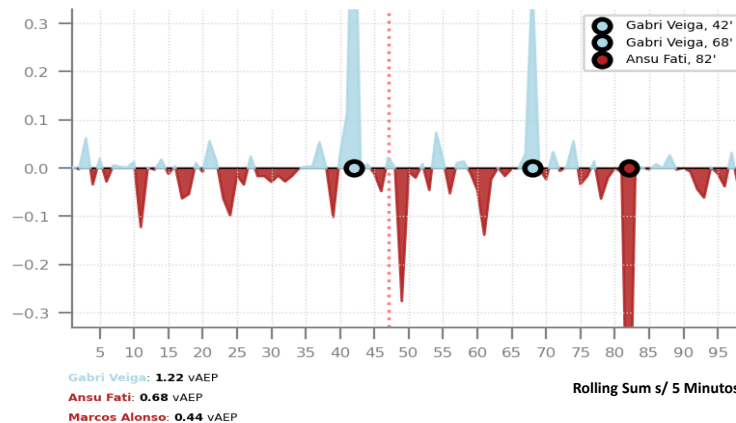


Long-Term Momentum Tendencies

It allows for establishing a comprehensive picture, either over a full season or, if desired, a longer period, regarding the team's sustained performance. This measurement is based on objective performance indicators – in this case, Expected Goals For vs. Against, contextualized through a moving average. With this type of globally focused analysis, the team's competitiveness can be measured based on what it produces on the field.

Celta Vigo 2-1 Barcelona | Valor Generado en Posesión

LaLiga 22/23 - J38
Celta Vigo ha dominado el 42.42% del tiempo efectivo disputado



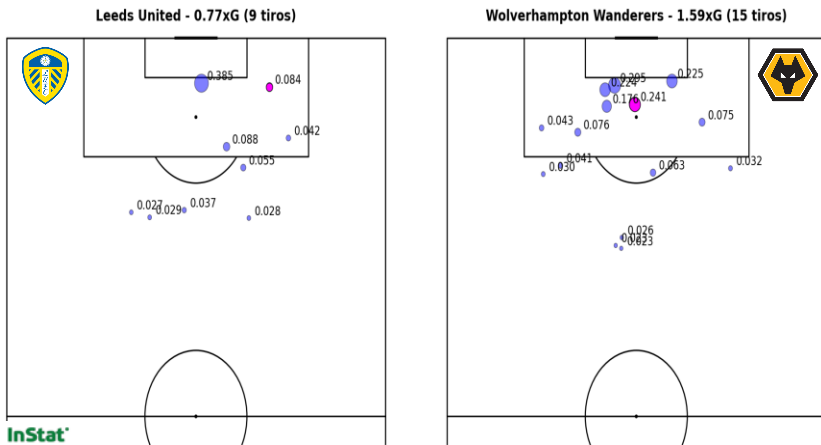
Match Momentum

This diagram illustrates the flow of value generated with the ball throughout a match, based on the vAEP model. It provides an overall view of the dominance phases that have occurred during a match, as well as the level of control a specific team has needed to score. Additionally, it gives insight into which team has controlled the game, enabling conclusions and analyses that are separate from the final result.

Context Analysis | Exploring Metrics: xG/xT



Leeds United (0.77) – (1.59) Wolverhampton | Mapa xG | 2022-2023, J1

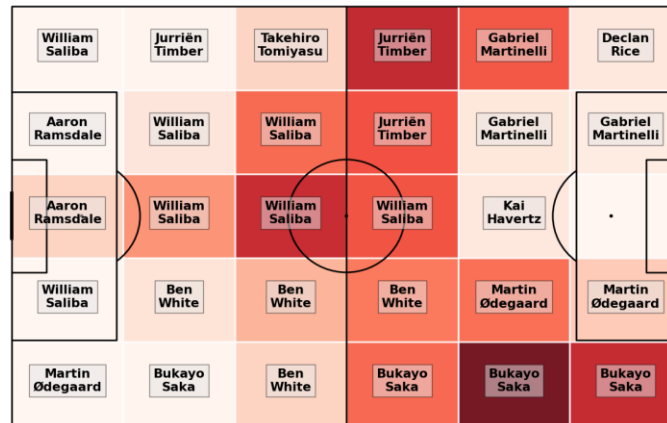


xG Map

This visualization displays on the field the specific location from which each shot is taken in a match, categorizing it based on the quality that the goal-scoring opportunity represents. To achieve this, an xG – Expected Goals – model is applied, which links, for each shot, a probability of ending in a goal based on its characteristics (zone, angle, striking surface).



Arsenal - Nottingham Forest, 2023-08-12
Mapa xT por Jugador y Zona, Arsenal



xT por Jugador

William Saliba	1.045810
Bukayo Saka	1.029705
Thomas Partey	0.809381
Declan Rice	0.804980
Martin Ødegaard	0.637302
Ben White	0.528888
Gabriel Martinelli	0.492179
Kai Havertz	0.453400
Jurriën Timber	0.375267
Takehiro Tomiyasu	0.257882
Eddie Nketiah	0.179373
Aaron Ramsdale	0.126302
Leandro Trossard	0.068847
Gabriel Magalhães	0.007555

On-Ball Value Added Heatmap

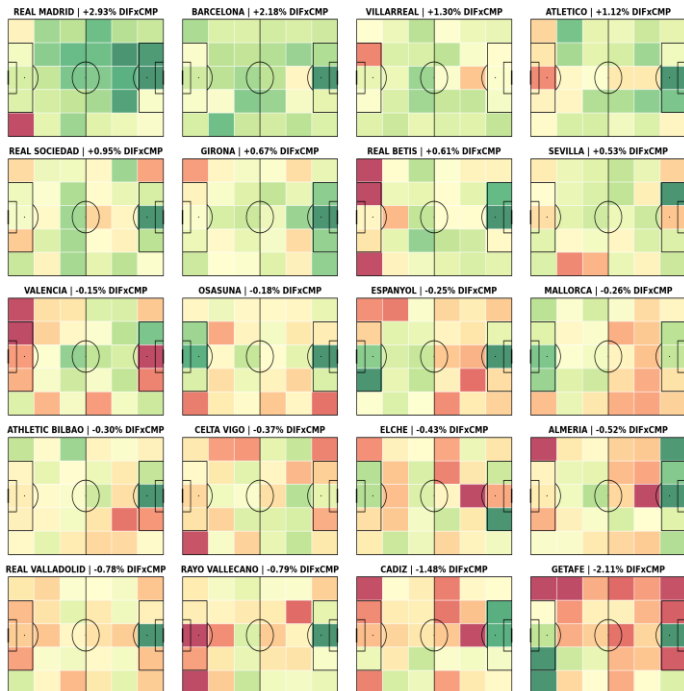
Expected Threat (xT) – based on the logic of xG – is one of several advanced indicators used to assign value to each action during a play based on its contribution to the team's likelihood of scoring in subsequent actions. This can result in the generation of a wide array of visualizations, among which we highlight this dominance visualization. In this visualization, we can observe which areas pose the most danger in a match and identify the player leading the team in that aspect.

Context Analysis | Exploring Metrics: xPass



% Diferencial Acierto en Pases | Real vs. Estimado, por Zona | LaLiga 22/23

Acumulado Temporada | Pases y Centros en Juego Abierto
Se mide la calidad, por cada equipo, en la ejecución del Pase respecto al % de acierto estimado por el modelo xCMP



DAP - Diferencial (%) de Acierto en Pases s/xCMP Top 15 | LaLiga 22/23

Jugador	Minutos	N. Pases	xPass%	DAP%*
Matija Nastasic	988	298	75.9	5.15
Rodrygo	2591	1050	83.4	4.988
Toni Kroos	2320	2482	86.7	4.837
Frenkie de Jong	2716	2320	86.2	4.408
Andoni Gorosabel	1858	1049	80.4	4.403
Aitor Paredes	947	521	85.0	4.384
Martin Valjent	2888	1123	75.9	4.167
Axel Witsel	2473	1328	88.9	4.104
Mario Hermoso	2260	1515	82.9	4.042
Eric Garcia	1545	1257	87.3	4.034
Igor Zubeldia	2767	1557	81.9	4.023
Lisandro Magallán	997	391	80.2	3.958
Aurélien Tchouaméni	2282	1700	89.3	3.871
Aïssa Mandi	1601	911	87.0	3.777
Andreas Christensen	1887	1507	90.4	3.761

Jugadores de Campo | Normalizado por 90 Minutos
Pases y Centros en Juego Abierto
+900 Minutos



Pass Completion Models (xPass)

We understand the **xPass** – as Statsbomb names it – as the indicator that defines the probability of a pass being completed and received by a teammate. Additionally, it provides information on the value that this pass contributes to a specific possession.

The xPass model calculates the probability of success based on a set of variables derived from event data: position, distance, and angle of the pass's start and end, pass type (center, long/short, deep, set-piece, or moving), body surface involved, and time elapsed since the previous event.

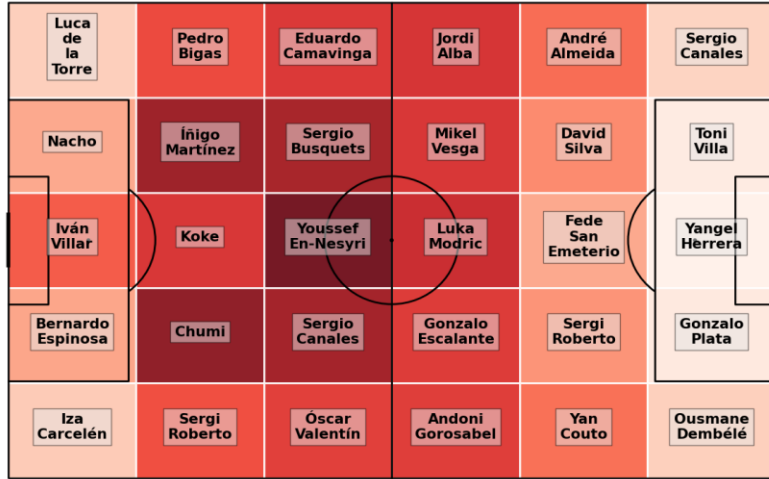
To analyze and interpret this indicator, among other subsidiary metrics, we can find DAP (Differential of Accuracy in Passes), which compares a player's actual success rate with what the xPass model predicts. On the left, we display the differential by zone for each LaLiga team in the 2022/23 season; and on the right, the player ranking. As we can observe, Matija Nastasic succeeds in 5.15% more passes than expected based on the characteristics of those passes. Two of the world's leading figures in positional play, Toni Kroos and Frenkie de Jong, are prominently featured. Additionally, the indicator for Rodrygo Goes is noteworthy, achieving significantly higher accuracy than predicted, especially when intervening in advanced areas of the field.

Performance Analysis | Exploring Metrics: VAI



Líderes en VAI, por Zona | LaLiga 22/23

Valor Generado de las Secuencias en las que el jugador interviene en su inicio (3^{er} Iniciales de cada posesión)
Se toma en cuenta el valor marginal de la acción (xT) y el peligro de la secuencia (xG)

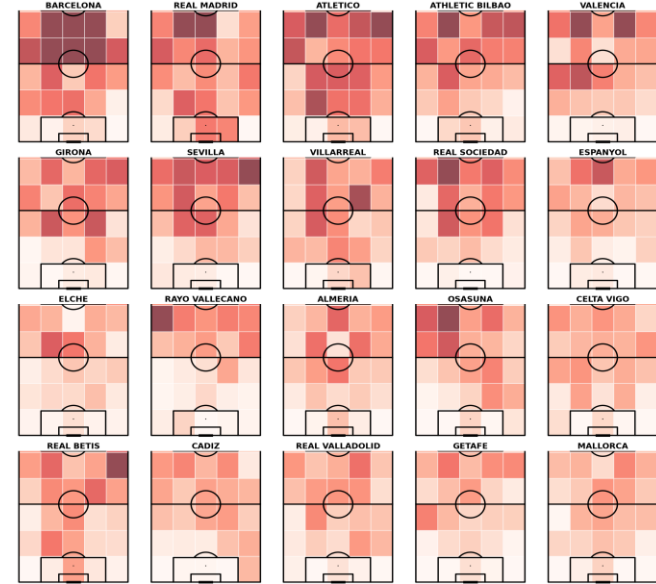


Acciones Efectivas en juego abierto
+900 Minutos Jugados



xG Agregado en Origen, por Zona de Inicio de la Posesión | LaLiga 22/23

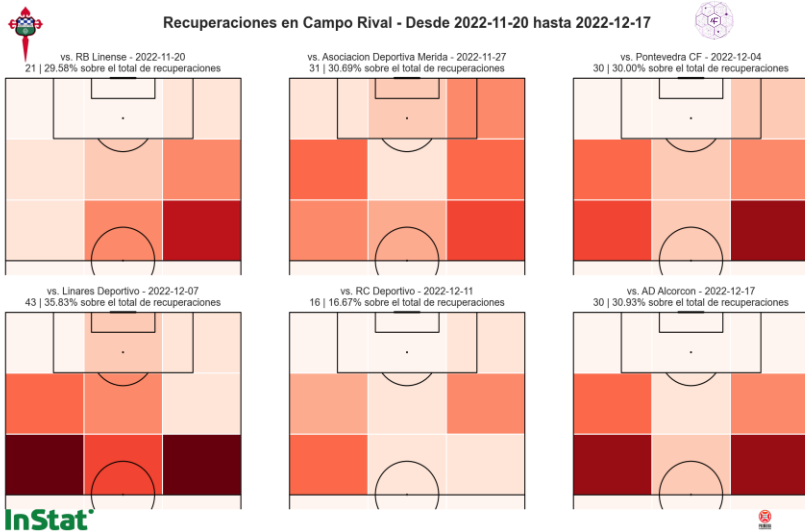
Zonas en las que se originan las secuencias que generan mayor volumen de peligro
Acciones Efectivas en Juego Abierto realizadas en los 3^{er} Iniciales de cada Posesión acabada en Tiro



Value Added on Buildup Initiation (VAI)

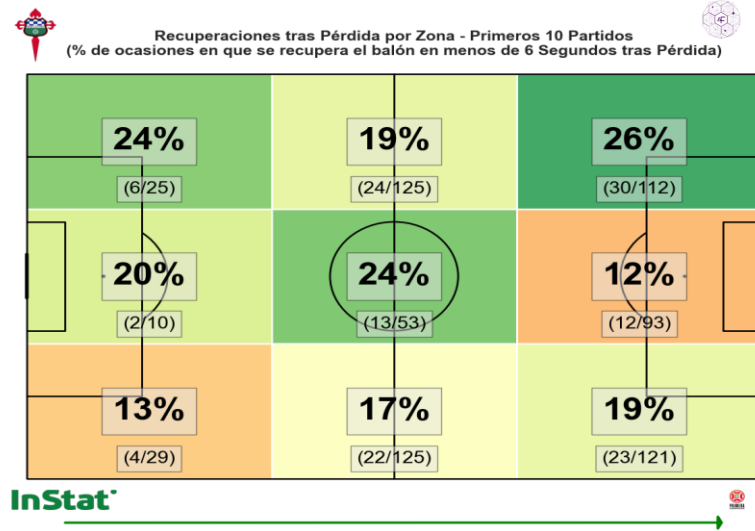
This indicator explores the player's ability to create dangerous situations in the initial moments of possessions - the first 3 seconds. The calculation takes into account both the individual value contributed in the beginning of the sequence and the quality of the goal-scoring opportunity ultimately generated – xG. Illustrated on a field diagram, as shown in the left visualization, we can understand, for each zone of the field, which player leads in this indicator within LaLiga 22/23. Simultaneously, on the right, we see the zones where each team in the league originates sequences that create the highest-value scoring opportunities.

Performance Analysis | Defensive Situations



High-Recovering Areas

Through this visualization, we can locate the set of potentially dangerous recoveries – in favor of the team performing them – measuring their total volume and distribution across the entire opponent's field. In this case, instead of placing the actions at an aggregated level, various campograms are used to represent the last six games. This allows us to observe the differences based on the opponent.



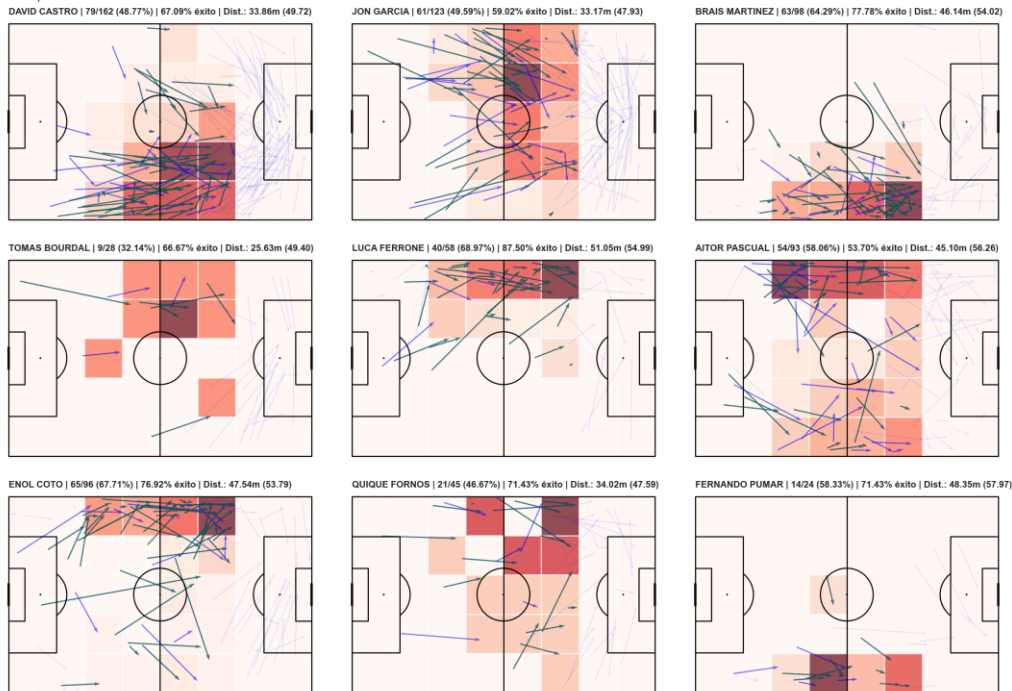
Immediate Pressure Efficiency

It is crucial for teams that seek to take the initiative and are aggressive in pressure after losing the ball to measure and understand how frequently they quickly recover the ball after losing it. By dividing the field into nine zones, the percentage of occasions when the ball is recovered within six seconds of the loss is displayed. The total number of losses and recoveries recorded is provided in parentheses.



Distribución de Acciones Defensivas vs. Envíos Progresivos del Rival en zonas de Anticipación Racing de Ferrol - Defensas, Últimos 28 partidos

Pases o Conducciones del Rival hacia adelante que acaban con acción defensiva. Se excluyen saques de banda
Se valoran acciones defensivas realizadas fuera de zona (anticipaciones o coberturas)



- Envío que Genera Acción Defensiva CON Recuperación
- Envío que Genera Acción Defensiva SIN Recuperación
- Acciones Defensivas en tramo inicial/final



Anticipation Actions

This visualization aims to illustrate the volume and effectiveness associated with anticipatory defensive actions, specifically those performed in response to frontal/progressive passes from the opponent in a relatively advanced area. In these cases, the defender must leave their defensive position to anticipate and execute an interception or challenge.

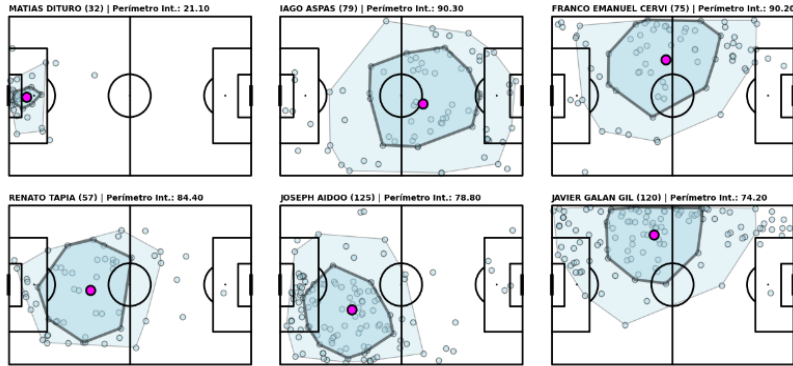
Accounting the frequency of such actions and their typical locations, per player, helps discern the roles established among defenders – for instance, identifying which center-back tends to hold position and which one seeks to anticipate. This information is crucial for efficiently designing the game plan. Similarly, understanding the success rate – whether such defensive action results in a possession recovery for the team – influences match preparation and decision-making, whether the analysis is conducted for the own team or the opponent.



Influencia Defensiva por Jugador
Celta de Vigo | Últimos 7 Partidos



InStat



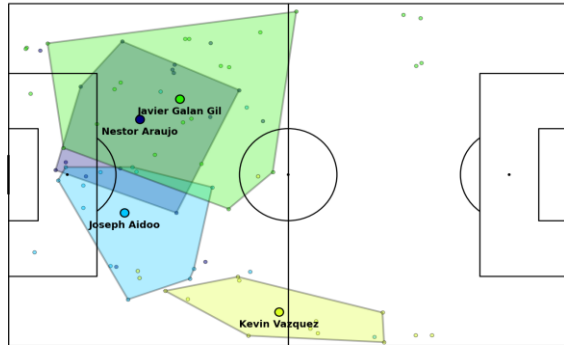
Convex Hulls for Defensive Contribution

Whether conceived at an aggregate level – measuring a set of matches to identify medium/long-term patterns – or studied for a specific game or a portion of it, these visualizations can provide a clear insight into the defensive space occupation of each player.

To create them, all defensive actions of the player in the studied period are analyzed and represented as scattered points across the field. A convex hull is then drawn around those points that are close to a centroid.

As a result, we obtain a representative area focusing on the player's defensive effort location, with a perimeter determined by the dispersion – the area they have the ability to cover or to which they can provide support. In terms of the team, this helps identify not only the defensive structure of the team in question but also specific behaviors, such as the distribution of roles in a double pivot or the assignment of support from wingers or midfielders to full-backs.

Zonas de Influencia Defensiva por Defensa
Celta de Vigo vs. Valencia | 2022-05-21



InStat

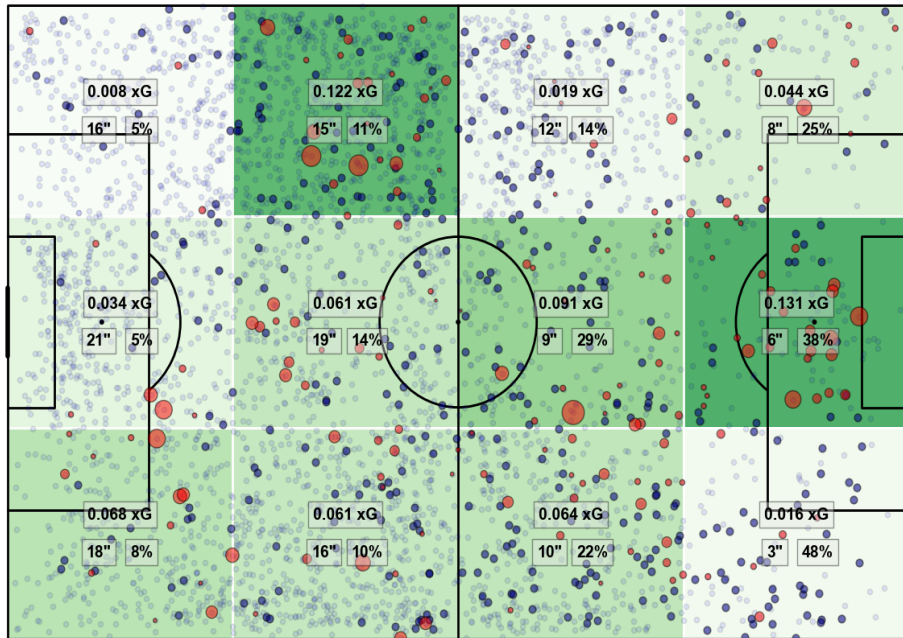


Mapa de Transiciones Ofensivas

Acciones que finalizan con tiro o incursión en área rival | Acumulado Temporada
Heatmap según el total de goles esperados por partido generados por zona
Se miden los segundos transcurridos entre la recuperación y el tiro/incursión



- Recuperaciones sin Consecuencias
- Incursiones en Área
- Tiros



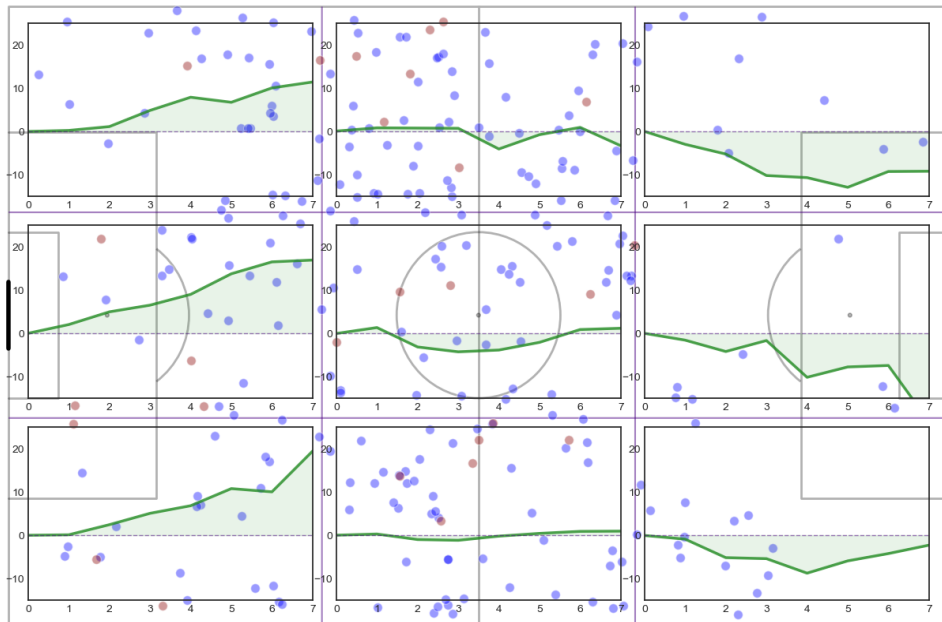
Transitions Matrix, per Recovery Zone

This visualization regards the team's ability to create goal-scoring opportunities through transitions. Specifically, it measures the quality of the chances generated in this aspect of the game, observing the origin or starting point. Areas where recoveries have been more significant are colored more intensely. Likewise, a larger red circle indicates higher-quality chances (xG). Additionally, we can see, by zone, the average time in seconds until a chance is created and the percentage of times a recovery leads to a goal-scoring opportunity.

Studying the evolution of this metric over the course of the season allows us to extract valuable aggregated indicators (see the caption) for the tactical exploitation and preparation of this phase of the game.

We refer to a productive offensive transition as any attack that creates a goal-scoring opportunity – entering the box or taking a shot – within 30 seconds after a recovery.





Immediate Ball Progression in Transitions

A key factor regarding transition play is the ability to progress with the ball vertically in the immediate period following ball recovery. This visualization shows the distance in meters that the team is able to progress in the first seven seconds after winning possession, organized by the field zone where the transition begins.

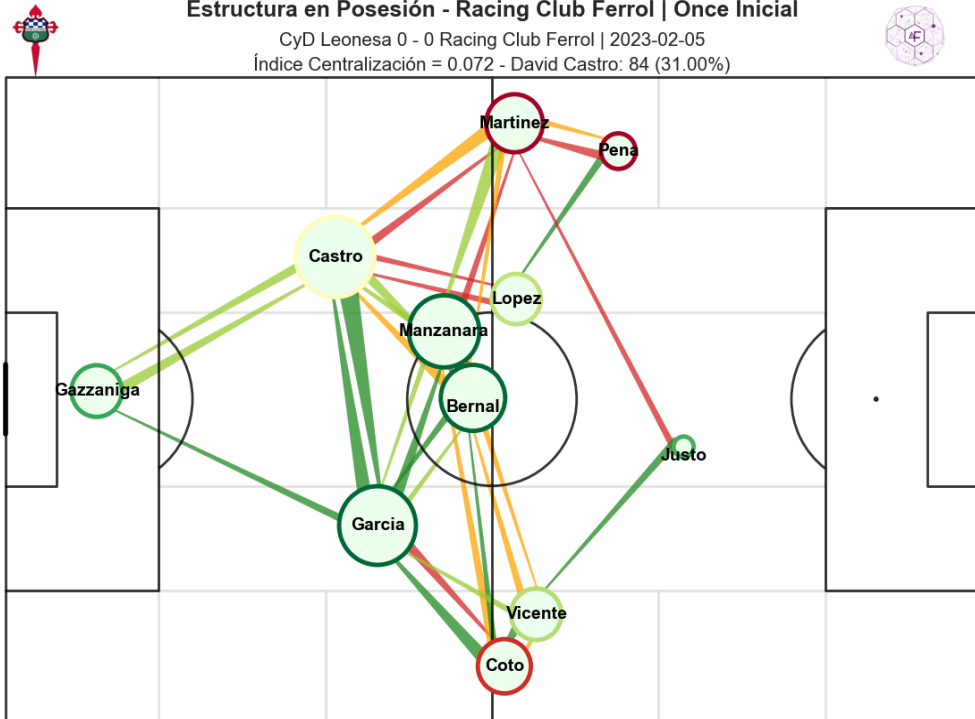
Its composition allows for identifying how a team approaches transitions, detecting the areas where they initiate transitions more aggressively and where they encounter more resistance. It also reveals whether the team tends to take a more patient approach, consolidating players before launching, or if they are teams that do not seek to create danger in this phase of the game.



Estructura en Posesión - Racing Club Ferrol | Once Inicial

CyD Leonesa 0 - 0 Racing Club Ferrol | 2023-02-05

Índice Centralización = 0.072 - David Castro: 84 (31.00%)



Passing Networks

This diagram aims to represent the team's structure with the ball in a specific match, along with the relationships between participants in positional play. The size of each circle corresponds to the level of participation – passes received – while the color – from red to green – indicates the value – xT – contributed with their passes. For the connections, a similar system is used, with wider lines representing more common connections and green lines indicating connections that, on an aggregated level, bring the team closer – or do so more frequently – to goal-scoring situations.

Additionally, the subtitle reflects the centralization index, which measures the degree of dispersion/concentration of possessions among team members, allowing identification of the player who takes on more organizational responsibilities within the structure.

Número de Pases Completados



Valor Generado con Pases (xT)



InStat

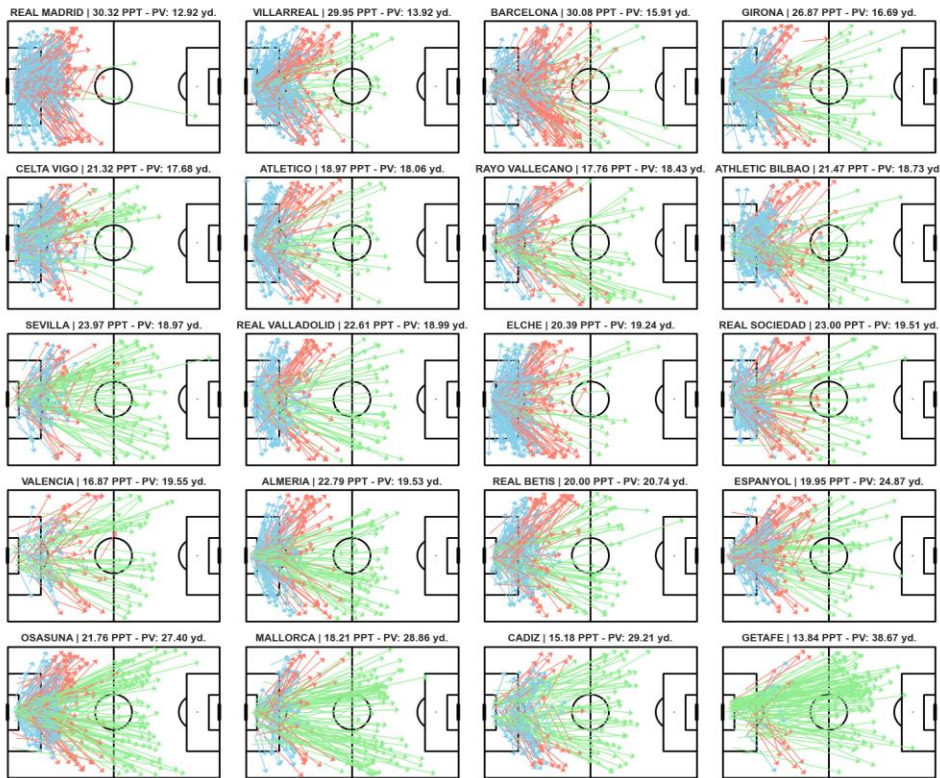




Pases del Portero Clusterizados | LaLiga 22/23

Últimos 10 Partidos | Se incluyen Saques de Puerta
PPT = Pases por Partido | PV = Progresión Vertical Media

Ordenados por Progresión Vertical Media, de un primer pase más corto (REAL MADRID) a un enfoque de salida de balón más directa (GETAFE)



Pass Clustering

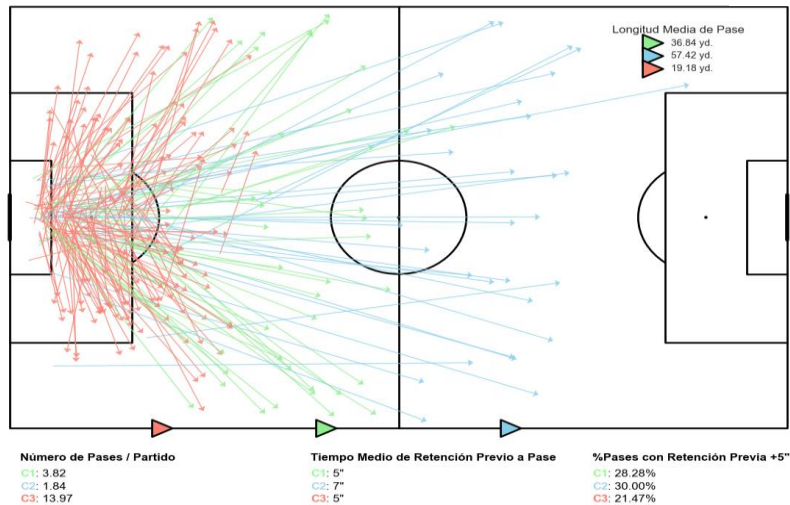
Clustering algorithms allow for the segmentation of a large amount of events that, individually, may not appear related, providing them with a categorization that facilitates analysis.

In this case, all passes made by goalkeepers – including goal kicks – for all LaLiga teams in the final rounds of the 22/23 season are represented. The process helps identify clear patterns in each team's ball distribution, and through direct comparison in the same diagram, we can distinguish different approaches to ball distribution. This ranges from a clear preference for playing to defenders, at the top of the visualization, to a distinct preference for long passes, aiming to progress quickly and create a clear situation through the second play – observed in teams at the bottom of the diagram.

Based on pass length, type, or progression direction, passes are grouped into three categories, visually differentiated to facilitate comparative analyses.



ALEX REMIRO (Real Sociedad) | Pases en Juego Abierto Clusterizados
LaLiga 22/23 - Últ. 10 Partidos

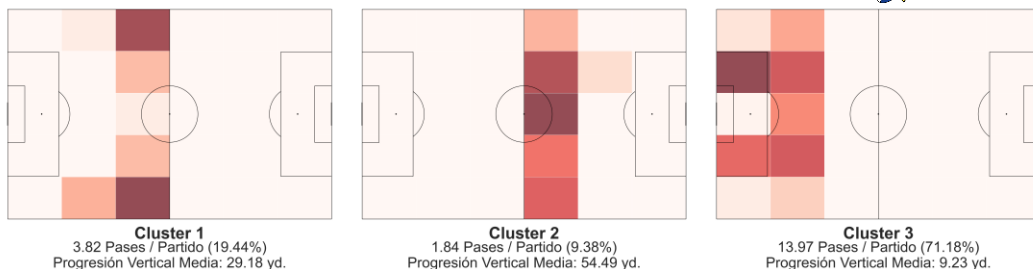


Pass Clustering on Player Events

Once again, we illustrate the clustering model to provide a detailed view of a second interpretation, this time at the player level. The model returns, for a specific player – in this case, a goalkeeper – the passes made during a segmented period of open play.

Furthermore, this segmentation allows us to obtain associated indicators, such as the frequency with which the goalkeeper holds the ball for an extended period, attracting pressure before making a pass – categorized by the resulting pass type – the average length of the pass, or the typical height on the field to which the ball is sent.

ALEX REMIRO (Real Sociedad)
Pases en Juego Abierto Clusterizados, Zona de Destino | LaLiga 22/23, Acumulado Temporada



In the lower visualization, we observe the typical distribution, by field zone, to which passes are made, categorized by the detected pass type.

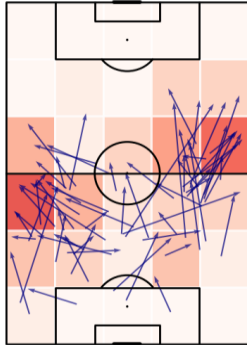


Salida de Balón - Pases Progresivos de los Centrales, por Zona de Destino | Últimos 6 Partidos

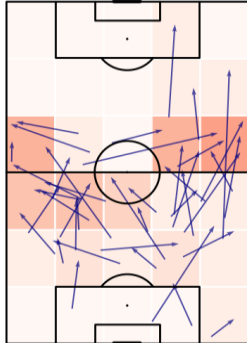
Pases completados hacia adelante en juego abierto. Se omiten los pases paralelos al otro central



vs. CF Fuenlabrada - 2023-02-12
68 | 62.39% s/ total (28.44% a campo rival)
28.44% Pases entre Centrales

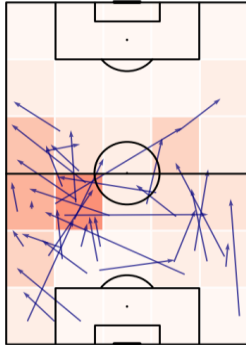


David Castro: 36 (61.40%) | -1.4xT
Jon Garcia: 33 (63.46%) | 0.69xT
vs. Algeciras CF - 2023-03-05
41 | 58.57% s/ total (28.57% a campo rival)
12.86% Pases entre Centrales

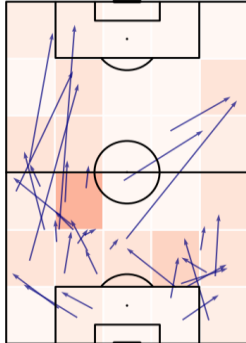


David Castro: 21 (51.22%) | -2.4xT
Jon Garcia: 20 (68.97%) | -0.078xT

vs. Pontevedra CF - 2023-02-19
36 | 69.23% s/ total (25.00% a campo rival)
9.62% Pases entre Centrales

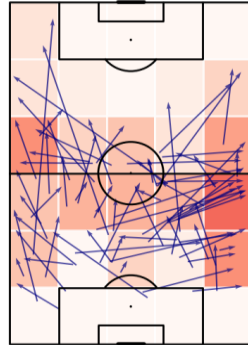


Jon Garcia: 9 (62.94%) | 0.14xT
David Castro: 27 (77.14%) | 0.0014xT
vs. AD Alcorcon - 2023-03-12
32 | 60.38% s/ total (20.75% a campo rival)
15.09% Pases entre Centrales

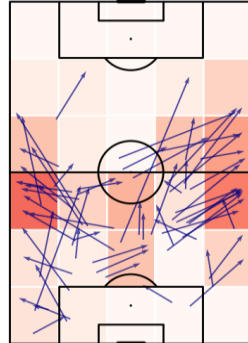


Quique Fornos: 12 (48.00%) | 0.014xT
David Castro: 20 (71.43%) | 0.22xT

vs. Linares Deportivo - 2023-02-26
74 | 55.22% s/ total (23.13% a campo rival)
34.33% Pases entre Centrales



David Castro: 33 (55.00%) | 0.13xT
Quique Fornos: 41 (55.41%) | 0.2xT
vs. CF Rayo Majadahonda - 2023-03-18
61 | 57.55% s/ total (19.81% a campo rival)
30.19% Pases entre Centrales



David Castro: 34 (64.10%) | 0.2xT
Quique Fornos: 27 (50.94%) | 0.12xT

Open-Play Sequences in Buildup from the back

It is worth studying the role, in the context of ball progression, of the interaction between center-backs and other inside players – such as central midfielders, attacking midfielders, and forwards. Through the figure presented below, we observe the distribution of progressive passes directed to players in specified positions – contextualizing these metrics in relation to the total number of progressive passes made by the center-backs. This helps analyze how a team can bypass the opponent's first defensive line.

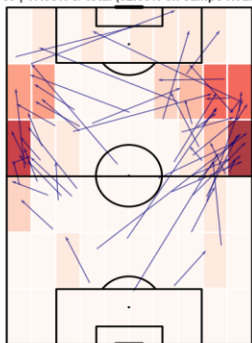
It is interesting, of course, to analyze where these passes are received, which can be observed by the intensity of the colored zones. Additionally, at the final end of the arrow depicting the pass trajectory, we can identify the receiver with their jersey number. As several aggregated indicators are also calculated, we can easily gauge the significance of these types of passes, understand their value, and determine the volume they represent in comparison to the total passes made by the center-backs.



Pases hacia los Extremos, por Zona de Recepción - Últimos 6 Partidos

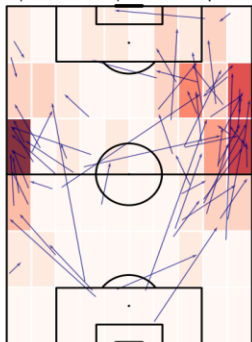


vs. CF Fuenlabrada - 2023-02-12
59 | 17.88% s/ total (32.53% en campo rival)



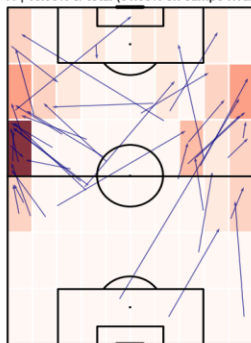
a Carlos Vicente: 38 (11.52%) | 1.7xT
a Heber Pena: 21 (6.36%) | 0.96xT

vs. Algeciras CF - 2023-03-05
66 | 19.30% s/ total (31.43% en campo rival)



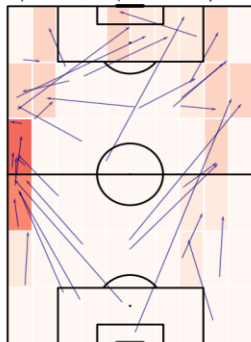
a Carlos Vicente: 38 (11.11%) | 1.1xT
a Heber Pena: 28 (8.19%) | 1.3xT

vs. Pontevedra CF - 2023-02-19
41 | 15.95% s/ total (31.58% en campo rival)



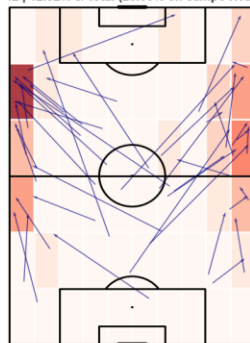
a Carlos Vicente: 18 (7.00%) | 0.28xT
a Heber Pena: 23 (8.95%) | 0.094xT

vs. AD Alcorcon - 2023-03-12
35 | 17.95% s/ total (35.62% en campo rival)



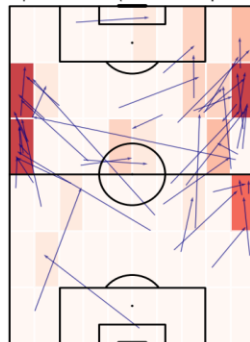
a Carlos Vicente: 16 (8.21%) | 0.44xT
a Heber Pena: 19 (5.74%) | 0.29xT

vs. Linares Deportivo - 2023-02-26
42 | 12.32% s/ total (25.60% en campo rival)



a Carlos Vicente: 22 (6.45%) | 0.18xT
a Heber Pena: 20 (5.87%) | 0.21xT

vs. CF Rayo Majadahonda - 2023-03-18
50 | 14.84% s/ total (29.71% en campo rival)



a Carlos Vicente: 30 (8.90%) | 0.34xT
a Heber Pena: 20 (5.93%) | 0.15xT

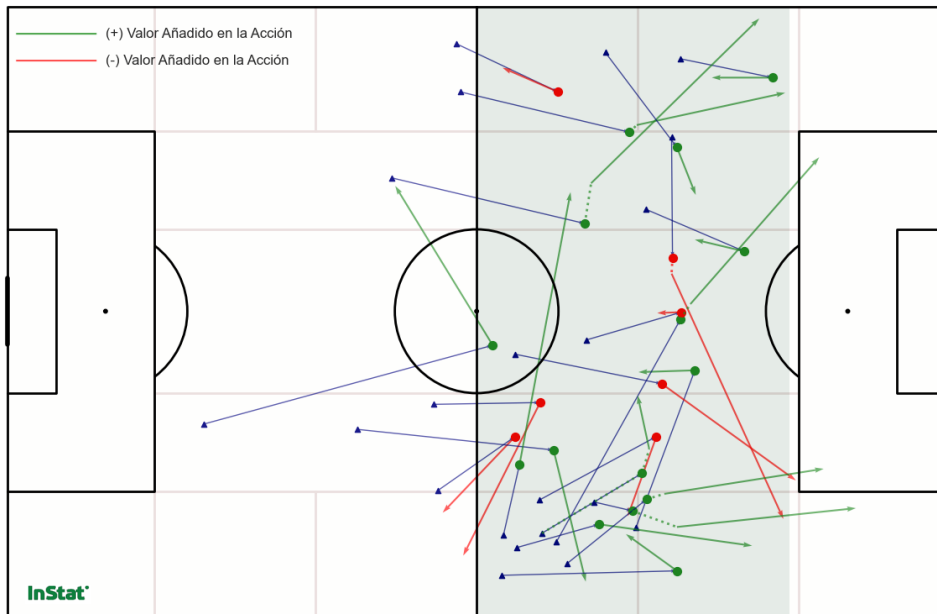
Ball Progression Sequences

For each match, it compiles the set of deliveries received by the wingers, visualizing the total trajectory and the distribution of zones where they occur. This is conceived to understand the typical area where the team is able to force one-on-one situations on the wing. If these situations occur relatively close to the center line of the field, we might conclude that the team lacks the ability to force such situations or create goal-scoring opportunities from the wing. However, if, as is more common, we observe that the receptions occur at a considerable distance, we could establish that the team collectively has the ability to generate advantageous situations for the wingers to create imbalances.



Secuencias de Apoyo del DC - MANU JUSTO

Recepciones Progresivas en el Área Sombreada que acaban en Pase Efectivo antes de 3"
Últimos 10 Partidos hasta 2023-03-18



InStat

8.00 Recepciones / Partido | 81.82% ABC | 18.18% ABA | 0.001 xT/90

- Pases hacia el Delantero - Inicio de la Secuencia
- Recepción del Delantero
- Resto de Acciones entre Recepción y Pase
- Pase del Delantero - Fin de la Secuencia

27.50% de Secuencias Completadas con Éxito
Si se Completa, 50.00% de Pases Progresivos
Progresión Neta Media -en metros- de la Secuencia: 14.32
Progresión Neta Media -en metros- de la Acción: 1.91



Supporting Sequences

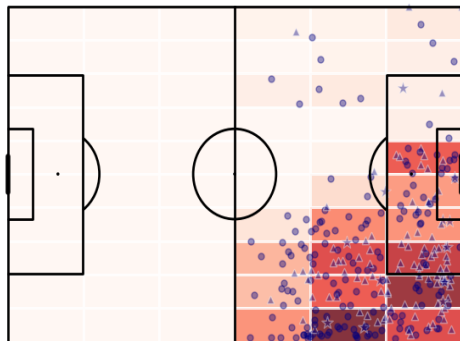
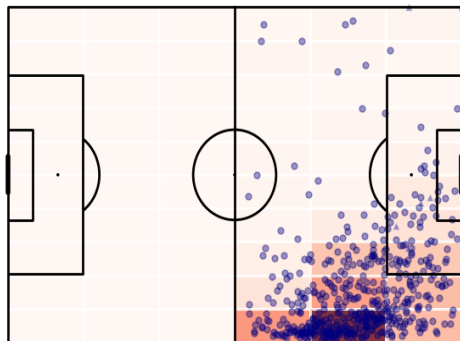
This diagram illustrates the progressive supports – after a forward pass – made by the center forward between the halfway line and the opponent's penalty area. These are supports, not just receptions, as they result from progressive passes, and the ball remains at the feet of the center forward for less than three seconds. This analysis sheds light on the role of the most advanced player in the build-up play and their involvement in the generation of attacking sequences in positional play, measuring whether the player's intervention adds value to the possession based on the xT indicator.

Additionally, key indicators are obtained that define how the sequence unfolds, such as the typical pattern – whether it is a passing one-two (ABA) or an eventual pass to a third player (ABC), depending on how many players are involved – or the progression achieved through this series of passes.



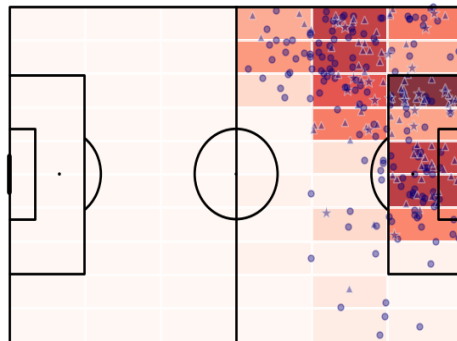
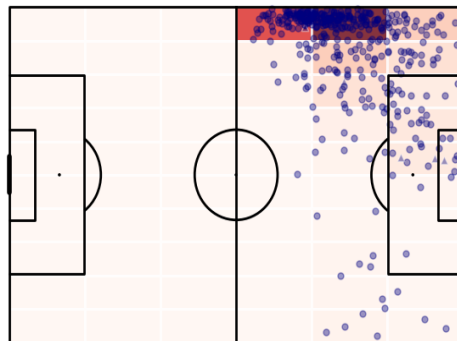
Progresión de los Extremos - Zonas de Inicio y Fin de Acción | Últimos 28 Partidos, Total Agregado
Recepciones en campo rival

23. Carlos Vicente



10 Acciones Prog. Efectivas/Partido (45.39% PV) | 0.22xT (59% vPasos)

7. Heber Pena



9 Acciones Prog. Efectivas/Partido (54.19% PV) | 0.18xT (44% vPasos)

Individual Progression Sequences

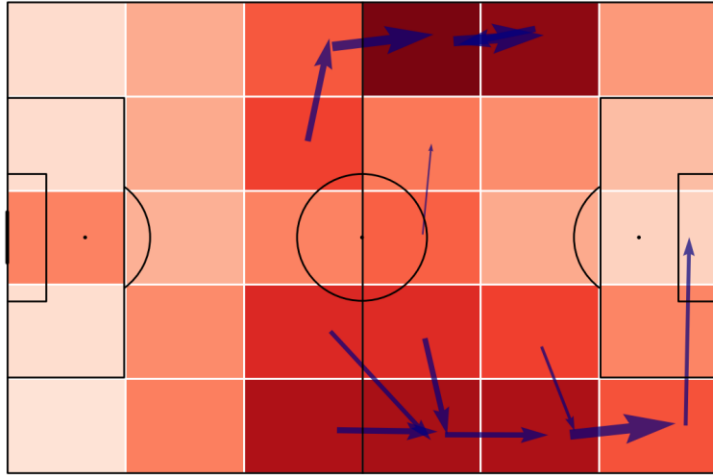
This visualization is conceived as an illustrative way to showcase the individual imbalance of offensive players, in this case, the wingers. At the top, the usual reception zones for each player are presented for the cumulative season. Below, the zones of progression completion are arranged, capturing both dribbles and passes and crosses.

We observe that, at a zone level, the flow of actions is slightly different, despite very similar starting points, as both players tend to receive clearly in open positions. While Carlos Vicente progresses more vertically, seeking the end line – whether open or closer to the small area – it is evident that Heber Pena has a higher percentage of his actions in interior zones, both outside and inside the penalty area.

Performance Analysis | Buildup



Itinerancia de Valor Generado por Zona de Origen
Acciones Ofensivas Completadas/Exitosas con Balón

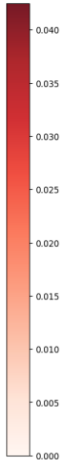
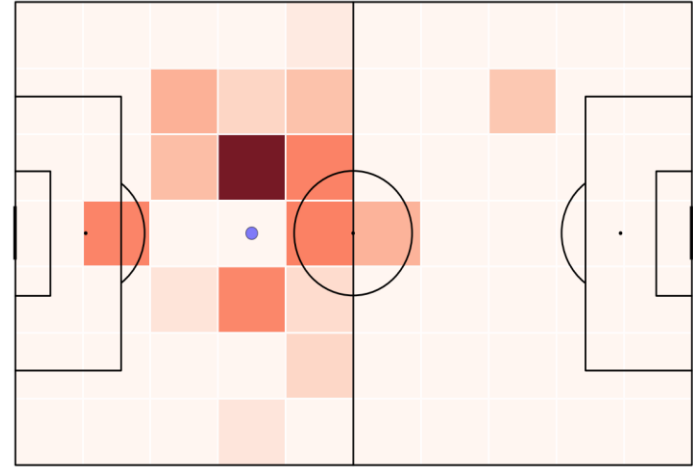


InStat

■ xT Agregado en movimiento de balón hasta la zona de destino más habitual, para cada zona de origen. Grosor dependiente del xT Agregado



Arsenal - Nottingham Forest, 2023-08-12
xT Transicional vía Pase desde un Punto Concreto, Arsenal

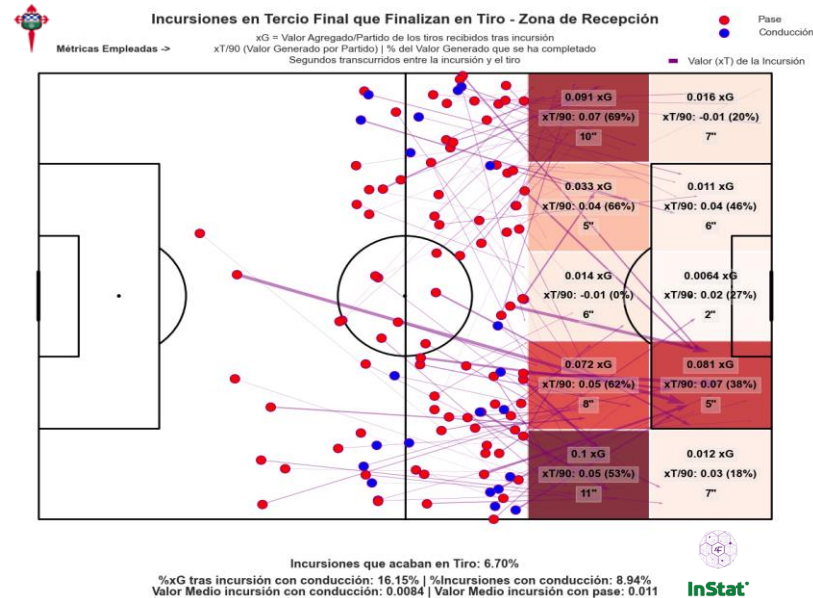
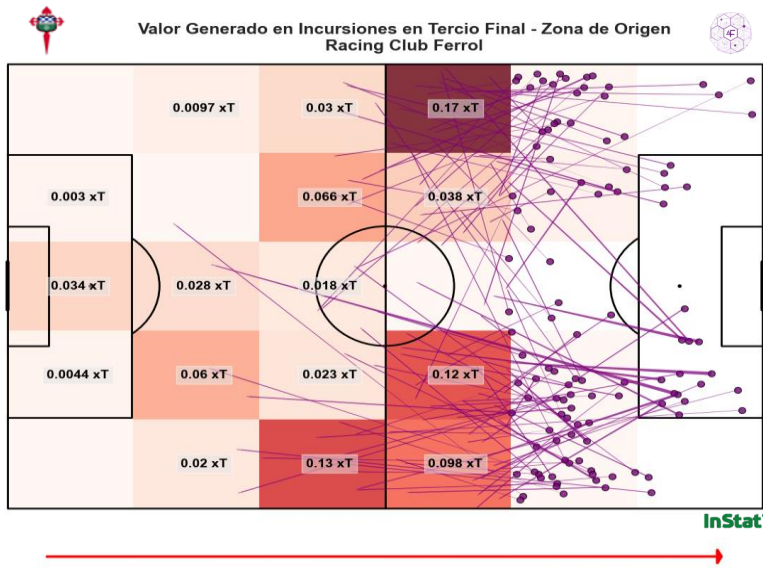


opta

Transitional Value Flows Generated in Buildup

These diagrams illustrate how the analyzed team tends to create high-value situations – those that bring the team closer to forcing high-quality goal-scoring opportunities (high xG). Using the Expected Threat indicator calculation model, the transitional matrix distributes the value created per zone, and through the arrows, it shows the zone toward the danger is typically generated.

Performance Analysis | Chances Creation



Incursions into Final Third

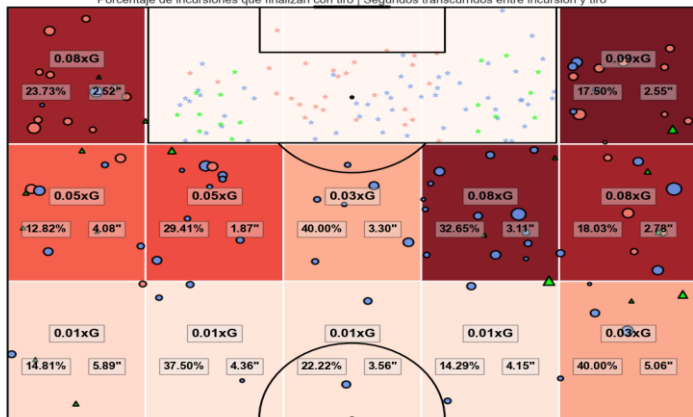
This visualization presents, by origin zone, the aggregated distribution of the value generated in possession – xT – with passes to the final third of the field, over the course of a season. This allows us to understand from which zones more dangerous passes are generated. The map on the right-hand side distributes, based on expected goals (xG), the reception points of transitions from which the team has the ability to generate the most danger. Additionally, the average time elapsed, in seconds, between the penetration and the shot is included.

Performance Analysis | Chances Creation



Incursiones al Área que acaban en Tiro, xG en Origen Racing Ferrol, Campo Rival

Conducciones, Pases o Centros hacia el Área. Se excluye balón parado
 xG/90 = Medidor de la calidad de las ocasiones generadas por el Rival de media por partido
 Porcentaje de incursiones que finalizan con tiro | Segundos transcurridos entre incursión y tiro



• CENTROS: 0.17xG/90 | 2.59" hasta tiro | 9.96 Acciones Ofensivas hasta tiro | 14.67% acaban en tiro | Key Pass Index: 92.59%
 • PASES: 0.32xG/90 | 3.19" hasta tiro | 1.45 Acciones Ofensivas hasta tiro | 15.30% acaban en tiro | Key Pass Index: 57.14%
 • CONDUCCIONES: 0.08xG/90 | 4.92" hasta tiro | 1.39 Acciones Ofensivas hasta tiro | 36.73% acaban en tiro
 • 57.80% xG via Pases | 30.90% xG via Centros



Threat Generated through Box Incursions, per Start Zone

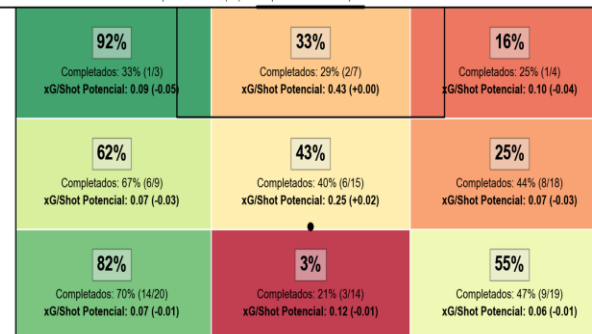
This visualization demonstrates the team's ability to threaten with penetrations. By origin zone, within a division of areas in the opponent's field – excluding the penalty area – the level of danger from penetrations from these areas is measured, whether through passes, crosses, or dribbles. It shows, for each of these zones, the xG per game associated with these goal-scoring opportunities, the success rate in penetrations, and the average seconds elapsed between entering the penalty area and taking a shot.

Below the illustration, aggregated metrics for the season can be observed, providing insights into the team's quality and effectiveness in the mentioned three specialties.



Pases al Área Realizados, %Valor Generado Completado con Éxito Últimos 6 Partidos, Área Rival

Pases o Centros hacia el Área. Se excluye balón parado
 % Calculado a partir del valor (xT) de los pases al área completados sobre el volumen total realizado



Threat Generated through Box Incursions, per End Zone

This visualization serves as a complement to the one shown on the left, as it helps verify, by the zone of penetration reception, the degree of effectiveness (success rate), the volume of value generated (%xT completed – bold value) in the penetration that continues within the penalty area – meaning it has not been repelled by the opposing defense – and the level of threat that these deliveries pose – xG/Shot Potential (average expected goals associated with a shot if it were to occur at the moment and place of receiving the pass into the area).

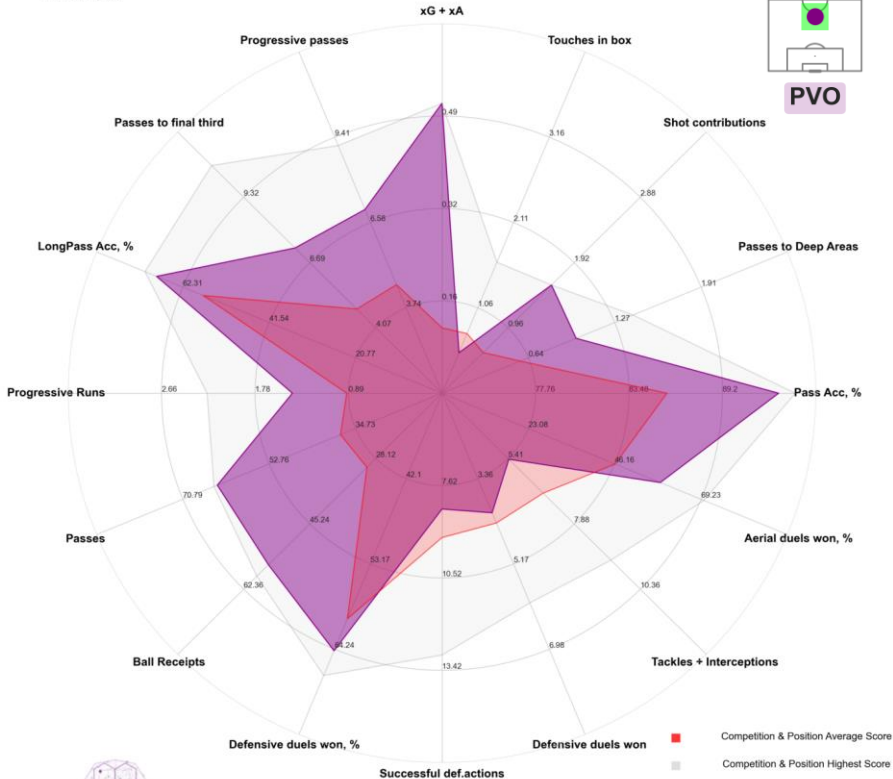
A high completed value, and therefore marked in green in the destination zone, implies high profitability (risk of the pass vs. reward/success) and, consequently, a warning sign for future opponents regarding defensive vigilance in that area.

Recruitment Analysis | Player Reports



Radar/ **H. Çalhanoglu | 91**
 MCD | Internazionale | TMark Value: €35.0M.
 Germany | 30 years old | 2721 Minutes | Right-Foot
 178cm | 76kg

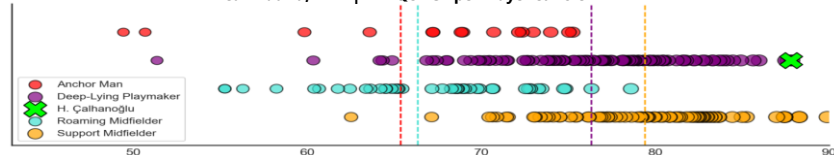
Defense 58 **Buildup** 93 **Attack** 73



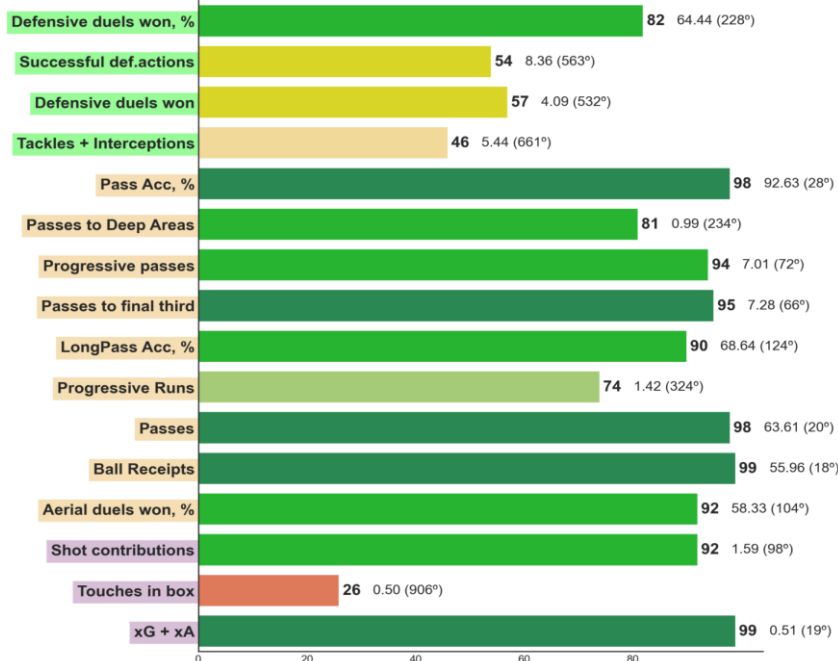
Data in per 90 minutes. Defensive metrics adjusted to team possession
 2023-2024 Season

wyscout

Real Madrid, DMF | ADEQUACY per Player & Role



H. Çalhanoglu, Percentiles vs. Selected Position (1231 players) in Selected Leagues

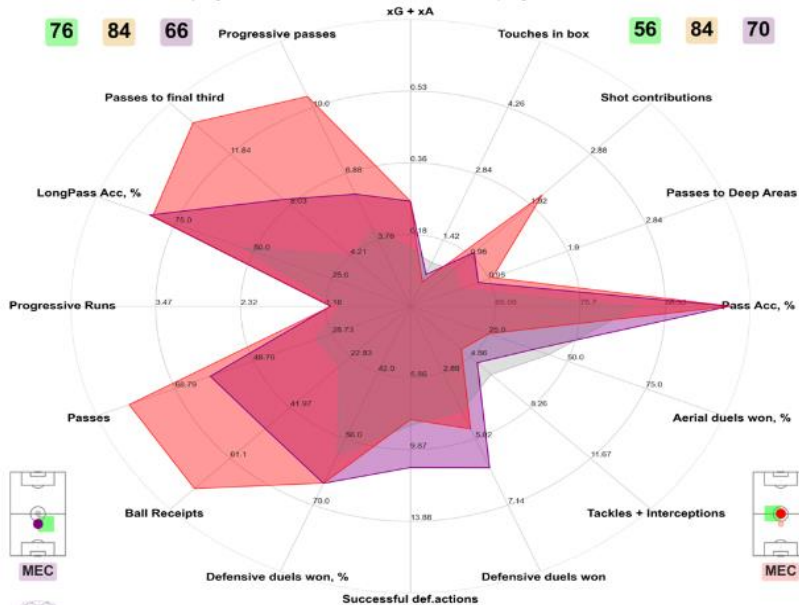


Recruitment Analysis | Player Reports



Aleksandar Pavlović | 89
 MCD MC | Bayern München | TMarket Value: €35.0M.
 Germany | 20 years old | 1323 Minutes | Right-Foot
 183cm | 78kg

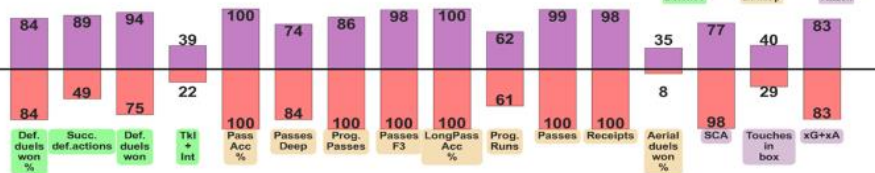
T. Kroos | 83
 MC MCD | Real Madrid | TMarket Value: €0.0M.
 Germany | 34 years old | 1995 Minutes | Right-Foot
 183cm | 78kg



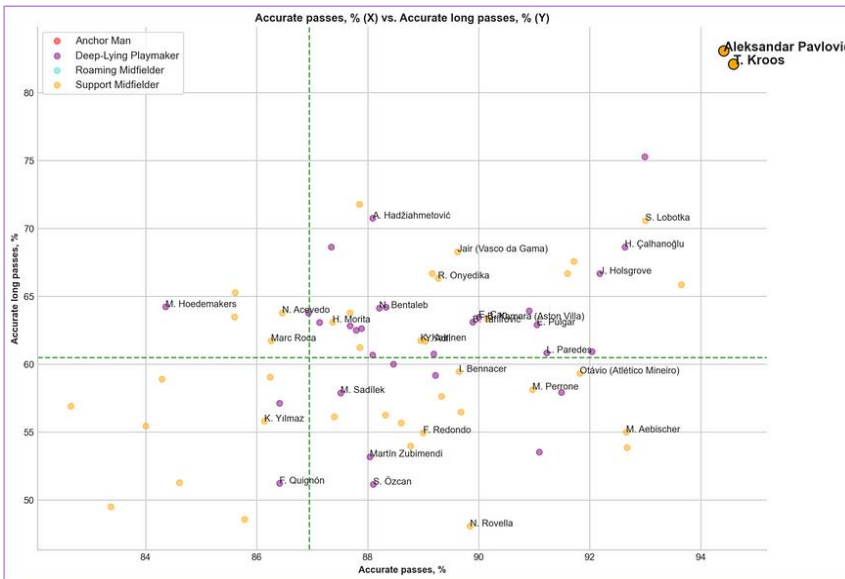
Competition & Position Average
 Data in per 90 minutes. Defensive metrics adjusted to team possession
 2023-2024 Season

wyscout

Defensa Buildup Attack



Jugador	Posición	Rol	Score	Adecuación	Similitud (Kroos)
T. Kroos	Germany	Support Midfielder	83	77,79	100
E. Camavinga	France	Support Midfielder	86	72,85	67,08
L. Modric	Croatia	Deep-Lying Playmaker	88	71,69	73,86
Dani Ceballos	Spain	Roaming Midfielder	74	70,92	66,76
A. Tchouameni	France	Deep-Lying Playmaker	77	65,79	54,92
F. Valverde	Uruguay	Roaming Midfielder	89	57,89	58,03



Segmentación de Modelos de Juego		
REAL MADRID	Estilo de Juego	Variables Clave
Estructura	Cuatro en la defensa, cuatro mediocampistas y dos delanteros – 4-3-1-2, 4-4-2.	<ul style="list-style-type: none"> • %Tiempo con formaciones de 4 defensas • %Tiempo con formaciones de 3 defensas • %Tiempo con formaciones de 2 atacantes • %Tiempo con formaciones de 4 centrocampistas
Defensa	Menos ataques posicionales enfrentados y más transiciones, menos tiempo sin el balón, un bloque medio y amplio con ayuda en las bandas, más ataques enfrentados desde el interior, mayor tendencia a construir tras recuperar. Presión mixta: alta en la fase inicial + repliegue en defensa de propio campo. Agresividad tras perder la posesión.	<ul style="list-style-type: none"> • Incursiones Profundas del Rival • %Acierto en Pases del Rival • Tendencia del Rival al pase largo • Centros del Rival al Área • Tendencia del Rival a atacar en posicional
Construcción	Ataques más posicionales, combinativos y largos. Menos juego por las bandas y menos pases largos. Mayor facilidad para asentarse con el balón. Ritmo de juego más alto. Capacidad para alcanzar zonas profundas del campo con la posesión. Salidas rápidas tras recuperar el balón y contrapresión después de perder la posesión. Talento individual para entrar al área con regates.	<ul style="list-style-type: none"> • Pases por Posesión • Tendencia a Centrar desde tres cuartos • Tendencia a lanzar pases a tercio final • Pases por Ataque Posicional • %Acierto en pase largo
Ataque	Mayor capacidad para generar disparos a través de ataques posicionales, logrando una mayor calidad promedio en sus oportunidades tras la posesión. Más toques en el área antes de un disparo, preferencia por un pase extra y menor inclinación a tiro lejano. Centros y últimos pases de alta calidad.	<ul style="list-style-type: none"> • Ratio de tiros por ataque posicional • Goles Esperados por Posesión • Toques en Área por Posesión • Distancia Media de tiro • Tendencia a buscar duelos aéreos

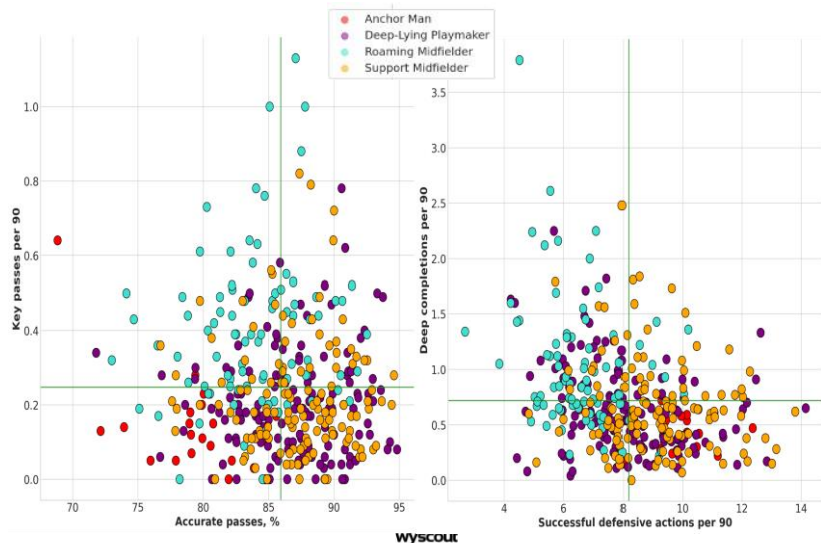
* Se muestran algunas de las variables más explicativas por categoría, si bien para cada una se seleccionan 15-20 métricas.

This procedure aims to group a set of analyzed teams, for each phase of the game, into different groups or clusters based on a series of descriptive variables related to the teams' playing style. These variables are categorized into four game aspects: Structure, Defense, Build-up, and Attack.

This approach allows teams to be segmented, grouped by similar playing styles, and their tactical approach to be defined. In scouting, segmentation processes of this kind have great practical utility, as they empirically identify teams with similar tactical contexts.

Segmentación de Modelos de Juego	
Modelo de Juego Similar	Modelo de Juego Cercano
<p>Equipos de las 5 grandes ligas que presentan el mismo estilo que el Real Madrid en las cuatro facetas del juego.</p>	<p>Equipos de las 5 grandes ligas que presentan el mismo estilo que el Real Madrid en tres de las cuatro facetas del juego (incluida la fase de construcción).</p>
Modelo Similar en CONSTRUCCIÓN	
<p>Equipos de las 5 grandes ligas que presentan el mismo estilo que el Real Madrid en la fase de CONSTRUCCIÓN</p>	

This procedure aims to group a set of analyzed players, for a specific position, into different groups or clusters. In this example, we observe the result of a clustering process applied to central midfielders—excluding wingers and attacking midfielders unless they have played enough minutes as pivots or central midfielders. Various metrics, considered descriptive of these positions, were used in the process. On the right, we can see the differences between the resulting groups in several of these metrics, leading to four distinct role types.



Anchor Man / Volante Tapón (CRP)			
Más trabajo defensivo, menor volumen de participación, estático con balón y más propenso al pase largo y hacia adelante. Especialistas defensivos, especialmente en equipos que juegan directo.			
Jugador	Equipo	País	Score
Pepelu	Valencia	Spain	75
K. Stöger	Bochum	Austria	72
T. Savanier	Montpellier	France	67
R. Tapia	Celta	Peru	61
Y. Keitel	Freiburg	Germany	61

Support Midfielder / Mediocentro de Apoyo (MEC)			
Más pases largos, más progresiones con pase, menos llegada al área, más pases a tercio final, más estáticos con balón. Acompañantes del pivote o interiores de base con responsabilidad en posesión.			
Jugador	Equipo	País	Score
Pedri	Barcelona	Spain	96
E.Palacios	Bayer 04	Argentina	95
K.Laimer	Bayern	Austria	93
P.Gross	Brighton	Germany	92
Vitinha	PSG	Portugal	89

Deep-Lying Playmaker / Pivote Organizador (PVO)			
Menos participación en tres cuartos y más volumen de juego, más pases cortos, menos progresiones por recepción, menos envíos a tercio final. Pivotes organizadores e interiores de mucha posesión.			
Jugador	Equipo	País	Score
Rodrigo	Man City	Spain	99
H. Calhanoglu	Internazionale	Turkey	91
D. Rice	Arsenal	England	86
Aleix García	Girona	Spain	84
G. Xhaka	Bayer 04	Switzerland	83

Roaming Midfielder / Interior Dinámico (IND)			
Menos pases largos, más progresión con balón, más generación de oportunidades, menos progresiones por recepción, más llegada al área, más pases clave. Interiores creativos, móviles y/o llegadores.			
Jugador	Equipo	País	Score
G. Lo Celso	Tottenham	Argentina	91
F. Valverde	Real Madrid	Uruguay	89
D. Szoboszlai	Liverpool	Hungary	84
D. Kamada	Lazio	Japan	79
N. Barella	Internazionale	Italy	76

Variables Clave para Segmentar Centrocampistas

- Tendencia a Progresar con Conducciones
- Tendencia a Pasar hacia Adelante
- Ocasiones Creadas por cada Recuperación
- Propensión a pasar en corto
- Volumen de acciones defensivas por cada Recuperación

Recruitment Analysis | Similarity Models

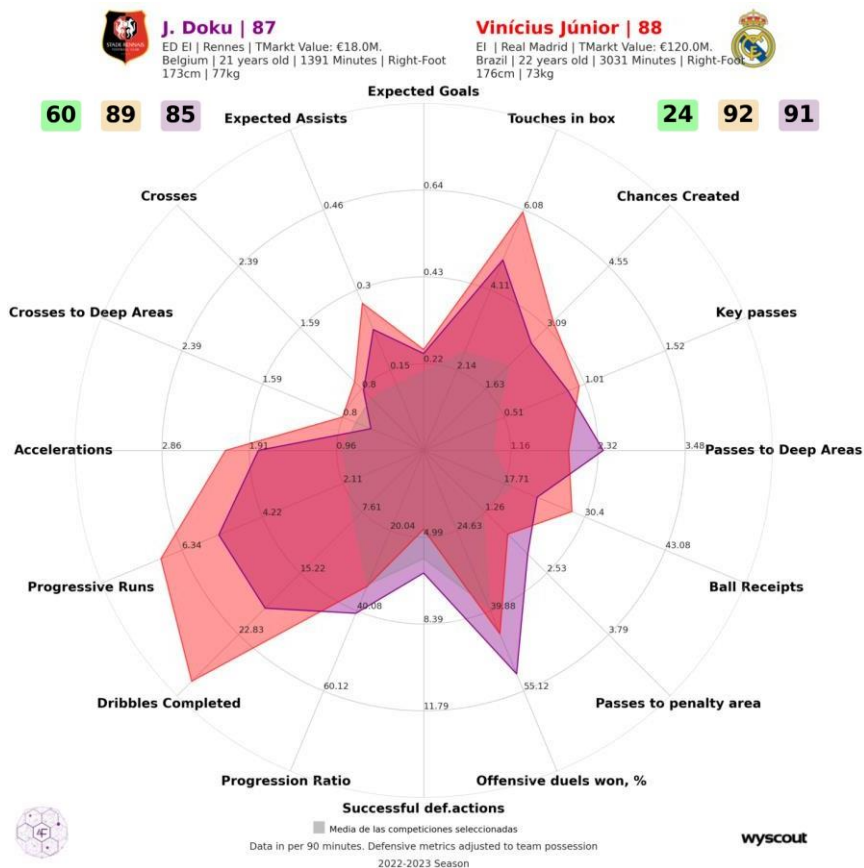


This kind of algorithms are meant to measure the degree of similarity between two players using an indicator calculated based on distances determined by the most explanatory metrics for defining the playing style of each position.



Jugador	Posición	Edad	Equipo	Pais	Similitud	Rol
J. Doku	ED, EI	21	Rennes	Belgium	85.97	Extremo Autosuficiente
M. Daramy	EI	21	København	Denmark	84.67	Extremo Profundo
K. Mitoma	EI	26	Brighton	Japan	82.57	Extremo Autosuficiente
R. Mirzov	EI, DC	29	Khimki	Russia	82.55	Extremo Autosuficiente
Galeno	EI	25	Porto	Brazil	82.1	Extremo Autosuficiente
D. Kutesa	MCO, EI	25	Servette	Switzerland	82.04	Extremo Autosuficiente
T. Keskinen	EI, ED	20	HJK	Finland	81.99	Extremo Profundo
K. Kvaratskhelia	EI	22	Napoli	Georgia	81.26	Extremo Autosuficiente
O. Dembélé	ED, EI	26	Barcelona	France	80.4	Extremo Autosuficiente
Rafael Camacho	EI, DC	22	Aris	Portugal	80.07	Extremo Autosuficiente
Bruma	EI	28	Sbraga	Guinea-Bissau	79.56	Extremo Autosuficiente
V. Misidjan	EI	29	Twente	Netherlands	79.56	Extremo Profundo
O. Sahraoui	EI	22	Heerenveen	Norway	79.32	Extremo Autosuficiente
Gabriel Martinelli	EI	21	Arsenal	Brazil	79.24	Extremo Autosuficiente
Éverton	EI	27	Flamengo	Brazil	78.55	Extremo Autosuficiente

Datos de Temporada 2022/2023



These types of algorithms are based on quantifying and aggregating the playing style of teams to then profile each footballer in a given position based on the most relevant indicators. **This allows for the identification of players who best match the desired role within a specific team and tactical context.**

The players returned by the model will have conditions better suited to meeting the team's needs in the transfer market. As a result, they will require a shorter adaptation process and will be familiar with similar playing mechanisms.

Segmentación de Modelos de Juego

Modelo de Juego Similar	Modelo de Juego Cercano
<p>Equipos de las 5 grandes ligas que presentan el mismo estilo que el Real Madrid en las cuatro facetas del juego.</p> 	<p>Equipos de las 5 grandes ligas que presentan el mismo estilo que el Real Madrid en tres de las cuatro facetas del juego (incluida la fase de construcción).</p> 
Modelo Similar en CONSTRUCCIÓN	
<p>Equipos de las 5 grandes ligas que presentan el mismo estilo que el Real Madrid en la fase de CONSTRUCCIÓN</p> 	

El **Modelo de Adequación** otorga más peso a aquellos centrocampistas que pertenezcan a equipos cuyo modelo de juego se encuentre en alguno de estos grupos.



Top15 Centrocampistas de Base (MC/MCD) Adecuación al Modelo de Juego

Jugador	País	Equipo	Rol	Score	Adecuación
A. Čerin	Slovenia	Panathinaikos	Support Midfielder	82	87.06
A. Vermeeren	Belgium	Antwerp	Support Midfielder	76	87
Aleksandar Pavlović	Germany	Bayern München	Support Midfielder	89	86,98
B. Tahirović	Sweden	Ajax	Deep-Lying Playmaker	79	85,97
A. Manneh	Gambia	OB	Deep-Lying Playmaker	77	85,12
H. Morita	Japan	Sporting CP	Support Midfielder	86	84,99
M. Sadílek	Czech Republic	Twente	Deep-Lying Playmaker	81	84,92
João Neves	Portugal	Benfica	Deep-Lying Playmaker	83	84,85
M. Camara	Mali	Monaco	Support Midfielder	80	84,84
S. Hezze	Argentina	Olympiacos Piraeus	Support Midfielder	79	84,04
A. Hadžiahmetović	Denmark	Beşiktaş	Deep-Lying Playmaker	77	83,30
S. Köhler	Germany	OB	Support Midfielder	81	83,16
Alan Varela	Argentina	Porto	Deep-Lying Playmaker	76	82,72
T. Leoni	Belgium	Anderlecht	Support Midfielder	82	82,5
X. Schlager	Austria	RB Leipzig	Support Midfielder	82	82,42

- MCDs & MCs menores de 30 años
- TOP12 Ligas en el Ranking UEFA 2023/24
- Performance Score > 75
- +1000 minutos en la temporada 2023/24

