

Granit Xhaka's Passing Patterns and Network

In this analysis, we will conduct a thorough examination of Granit Xhaka's passing patterns and network analysis. We will delve into his passing ability and contribution to team build-up, aiming to understand his role in Bayer Leverkusen's highly successful 2023-2024 season.

For this analysis, we are utilizing Statsbomb's available data. We have filtered the data to focus on pass events and, more specifically, on Xhaka's passes to gain a deeper understanding of his performance as a key player within the squad.

Here are the metrics I used to conduct this analysis:

pass_goal_assist, pass_shot_assist, and shot_statsbomb_xg. In addition to these, I also used the location of the pass event and the recipient of the pass and the end location of the pass.

The strength of these metrics are pivotal in quantifying the direct impact of a player's actions on game outcomes, particularly in assessing the effectiveness of passes in creating genuine scoring opportunities. By utilizing shot_statsbomb_xg we can have an objective assessment of each pass's potential to become a goal, grounding subjective observations in empirical data.

While xG offers a robust estimate of scoring probability, it does not account for the dynamic conditions under which a pass is made or received, such as player movement, defender positioning, or psychological pressures. Which can be huge factor and limit. Metrics like pass_shot_assist focus solely on event outcomes without considering the buildup play's quality or tactical setup, potentially overlooking a player's contribution to phases leading to the final pass.

By creating the network graphs for Bayer Leverkusen, it became evident that Xhaka plays a central role in the team's passing network, as illustrated in Figure 1.

Team Passing Network Analysis (2023-24 Season)

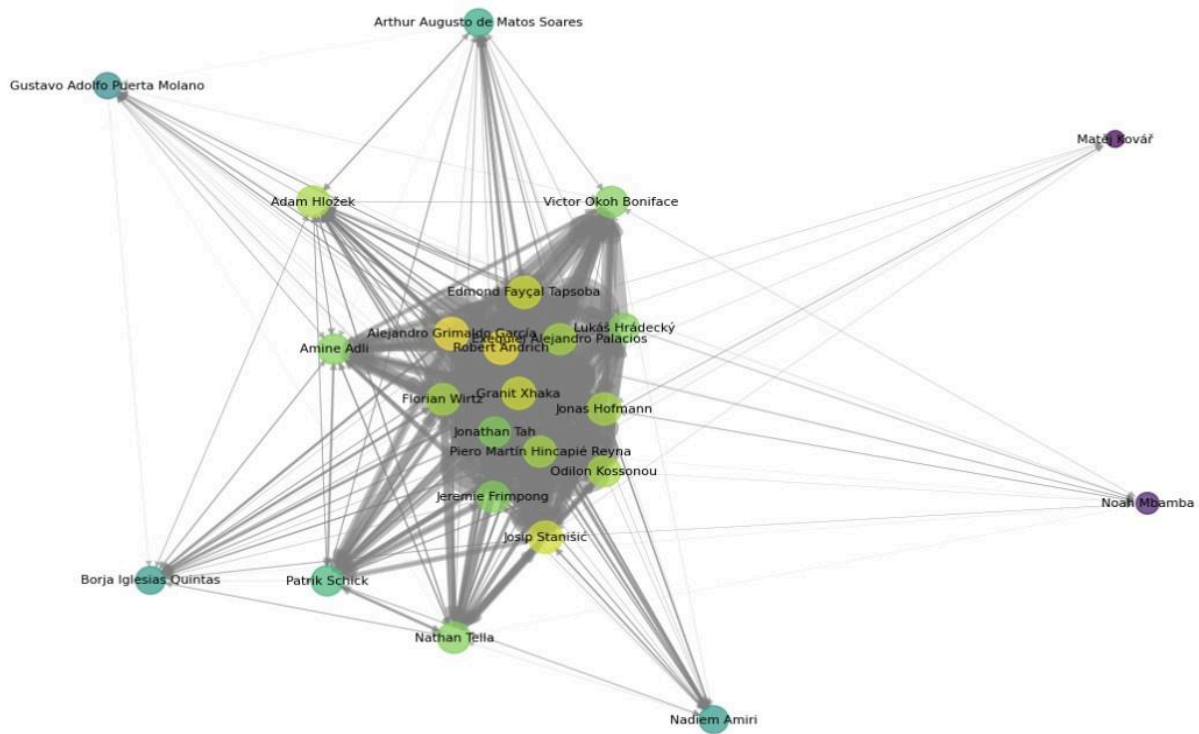


Figure 1: Team Passing Network Analysis (2023-24 Season) Bayer Leverkusen.

Granit Xhaka's positioning at the graph's center is evident. Therefore, further analysis of his passing behavior was conducted.

The graph illustrates Granit Xhaka's role as a hub. His prominence is visually emphasized by the large, distinctly colored node at the network's center. This central positioning, combined with the numerous connections, suggests a pivotal function in the team's passing strategy. Showing his involvement in ball circulation and the game tempo.

To better understand his connections to his teammates we can look at the graph below.

Granit Xhaka's Passing Network (2023-24 Season)

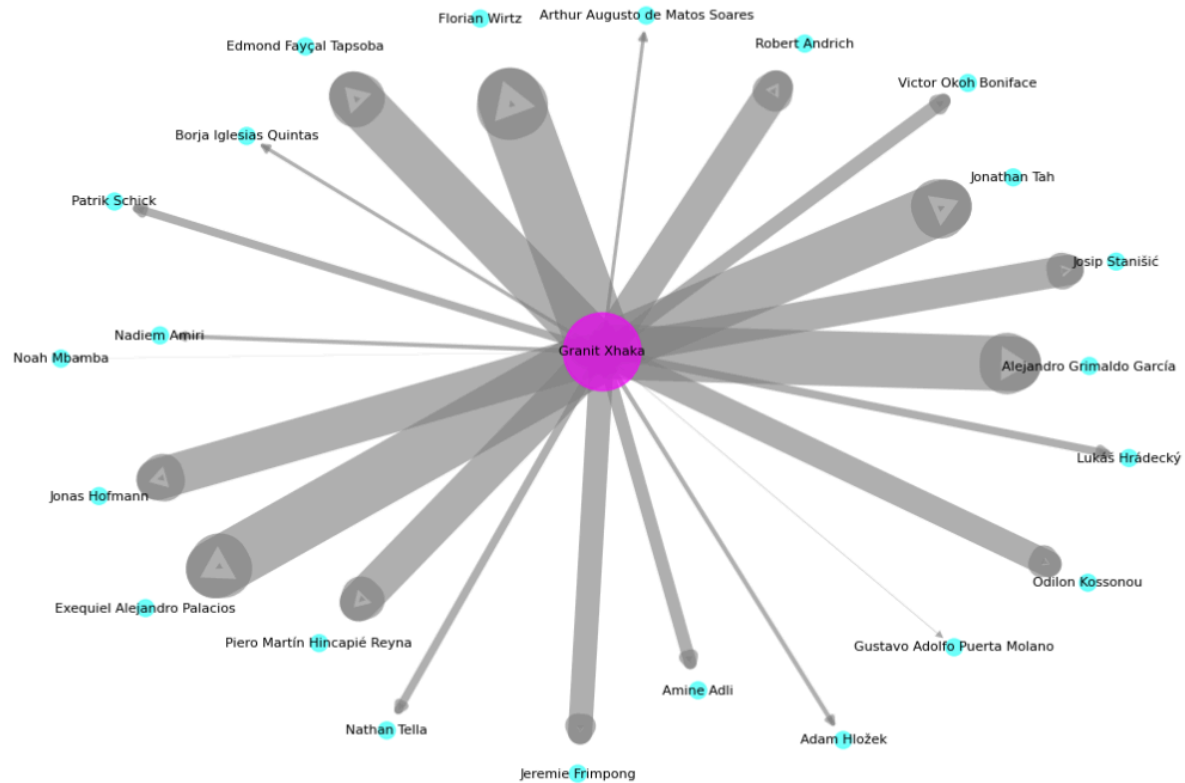


Figure 2 : Granit Xhaka's Passing Network (2023-24 Season)

The diverse range of connections between Xhaka and his teammates indicates his ability to facilitate play across different areas of the pitch. The thickness of these connections, representing the frequency of passes, suggests substantial interaction with specific players, potentially indicating preferred passing options or strategic plays.

This observation also shows that the distribution of connections to players located in different areas of the graph (forward, back, left, right) showcases Xhaka's versatility in passing. He is capable of switching play, initiating forward attacks, or recycling possession as needed.

Now that we have a solid understanding of Xhaka's passing performance, let's analyze the key passes he made during the season. To calculate the key passes, I utilized the metrics "passed_shot_assist" and "shot_statsbomb_xg." These metrics indicate whether a pass led to a shot and the expected goal value of that shot, respectively.

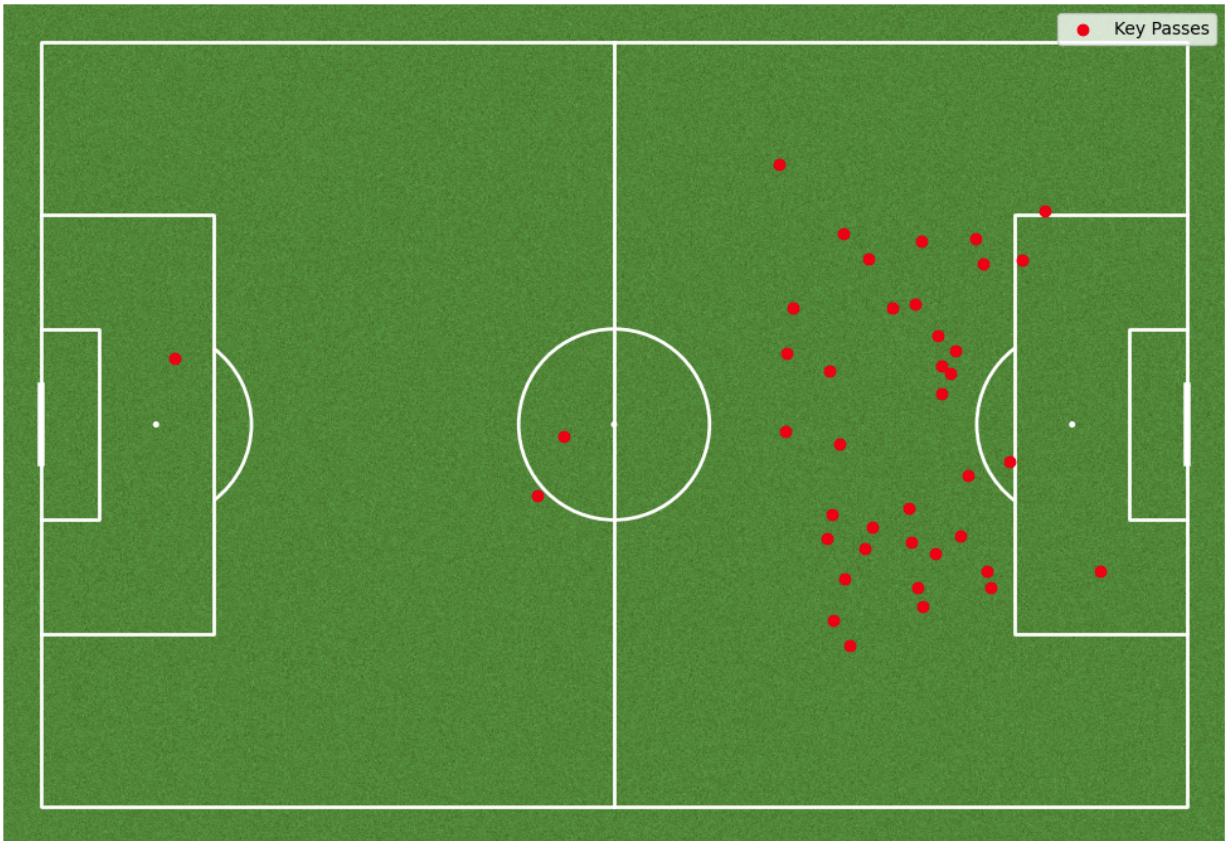


Figure 3: Key Pass Locations

By closer look at the spatial distribution, we observe Xhaka's key passes are predominantly focused within the midfield and as the play progresses into the final third. The scarcity of key passes in closer proximity to the goal suggests that his role is primarily centered on ball transition and playmaking, rather than delivering the final pass.

Furthermore, the data indicates that the total expected assists value is 0.00, despite a significant number of key passes. This suggests that while Xhaka plays a pivotal role in building up plays, the passes he delivers into potentially goal-scoring positions have a low probability of conversion into actual assists. Several factors could contribute to this:

- **Quality of Passes:** The passes may not be placing receivers in optimal scoring positions, or they may lack the necessary threat in terms of angle, speed, or timing.
- **Receiver's Position:** The positioning and overall effectiveness of the attacking players receiving the passes may not be ideal for capitalizing on these opportunities.
- **Defensive Pressure:** The presence of high defensive pressure at the time of receiving passes could diminish the chances of successful shots.

Finally, a heatmap illustrating Granit Xhaka's pass starting locations would provide valuable insights into the areas of the pitch where he is most active and influential. This visualization can aid in identifying his preferred operational zones and their contribution to his team's tactical framework.

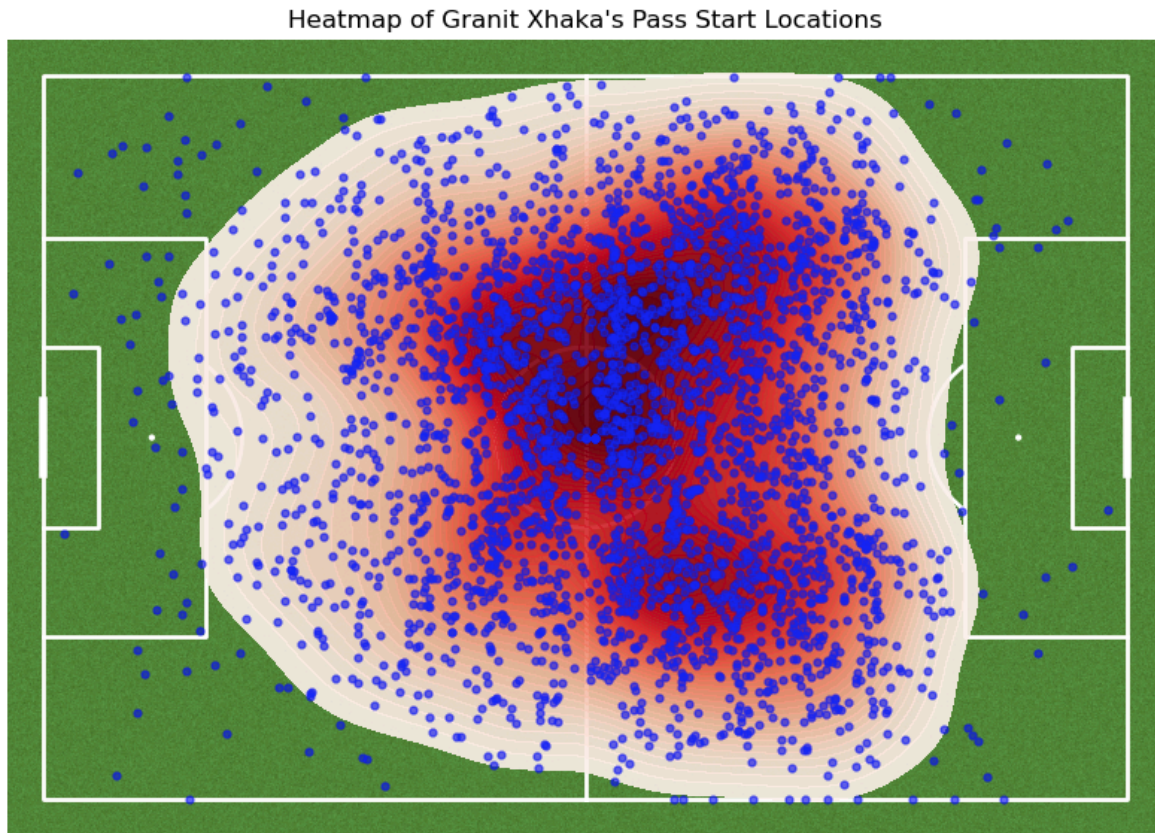


Figure 4: Heatmap of Granit Xhaka's Pass start Locations

As anticipated, his activity is largely concentrated in the central area of the pitch, with a tendency to favor his left side when passing the ball.

He undeniably had a remarkable campaign last season, and I love to see his team's achievements furthermore, as the Bundesliga benefits from such dynamic performances and shifts in the game. It is important to note that consistent performance is necessary for him to be considered a truly great midfielder.