

# **2023-2024 NBA Player Stats, Playoffs Data Analysis**

*An Analytical Report on Player Performance and Trends*

By

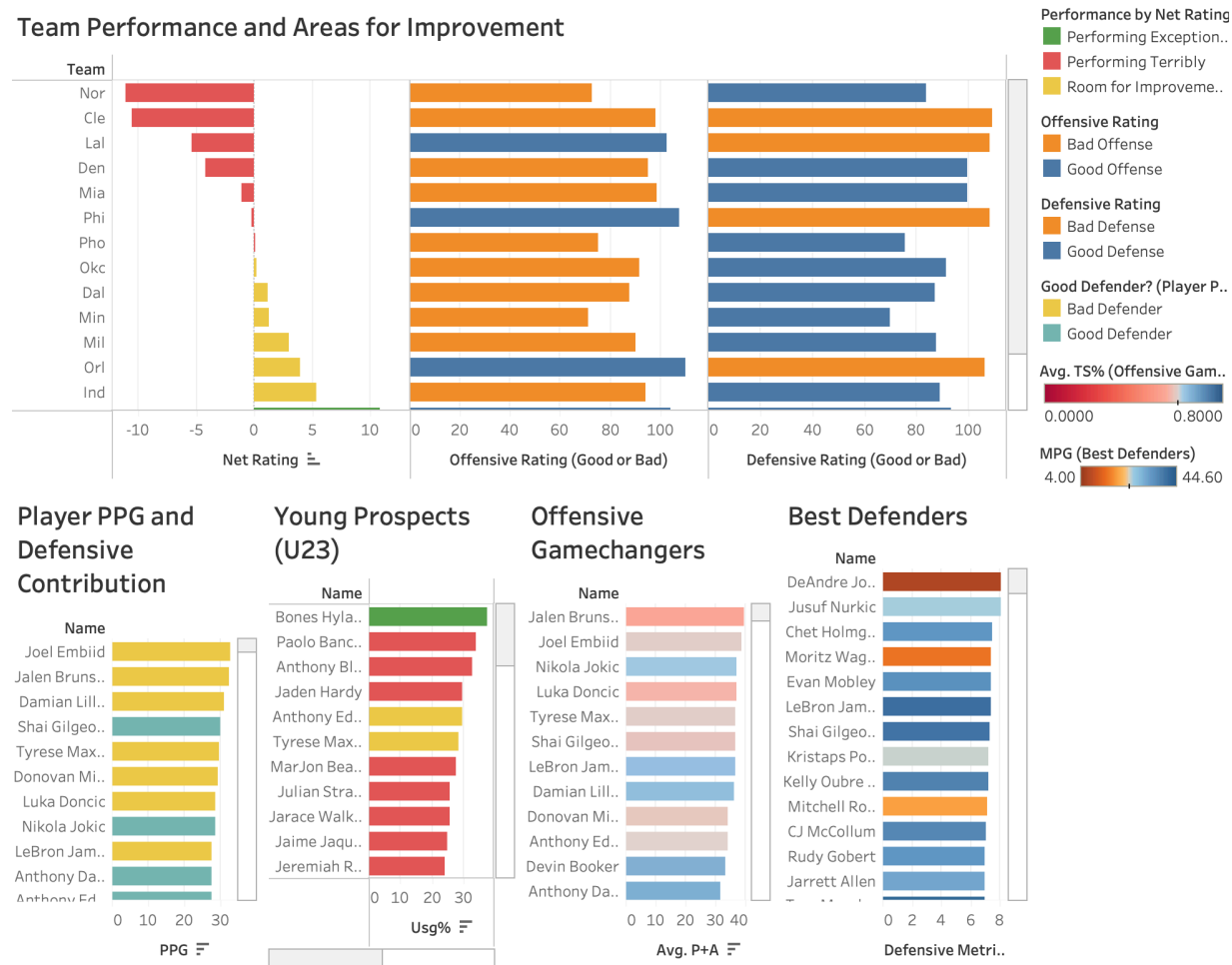
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Dashboard:



What is the Data About?

In the NBA playoffs, top-performing teams compete with one another to determine a single winner, but because only one team can become the league champion, player data is important for teams to make strategic decisions to gain the upper hand. This dataset contains comprehensive

statistical information on NBA players and teams for the 2023–2024 playoffs. The dataset consists of 213 records, each representing an individual player, and 29 columns that detail various performance metrics.

### **Key Data Points:**

**Player Information:** Includes player names, teams, positions, and ages, providing context about the players being analyzed.

**Game Statistics:** Basic stats such as games played (GP), minutes per game (MPG), and usage rate (USG%) help assess overall involvement in games.

**General Performance Statistics:** Core stats such as points per game (PPG), rebounds per game (RPG), and assists per game (APG) indicate impact on games. Defensive stats such as steals per game (SPG) and blocks per game (BPG) highlight defensive strengths. Shooting statistics such as shot attempts and percentages (2P%, 3P%, FT%, TS%) assess scoring efficiency.

**Advanced Statistics:** Offensive and defensive ratings (ORtg and DRtg) show efficiency and effectiveness on each side of the ball. Composite stats like points + assists (P+A) and points + rebounds + assists (P+R+A) summarize overall impact.

**Overall Purpose of the Data:** This dataset provides a valuable resource for analyzing player and team performance in the 2023-2024 NBA playoffs. It can be used to identify trends, compare players, and determine areas for improvement. The data also provides actionable intelligence for teams to make strategic decisions, such as identifying players who address areas where the team is lacking.

## Analyses:

### Team Performance and Areas for Improvement:

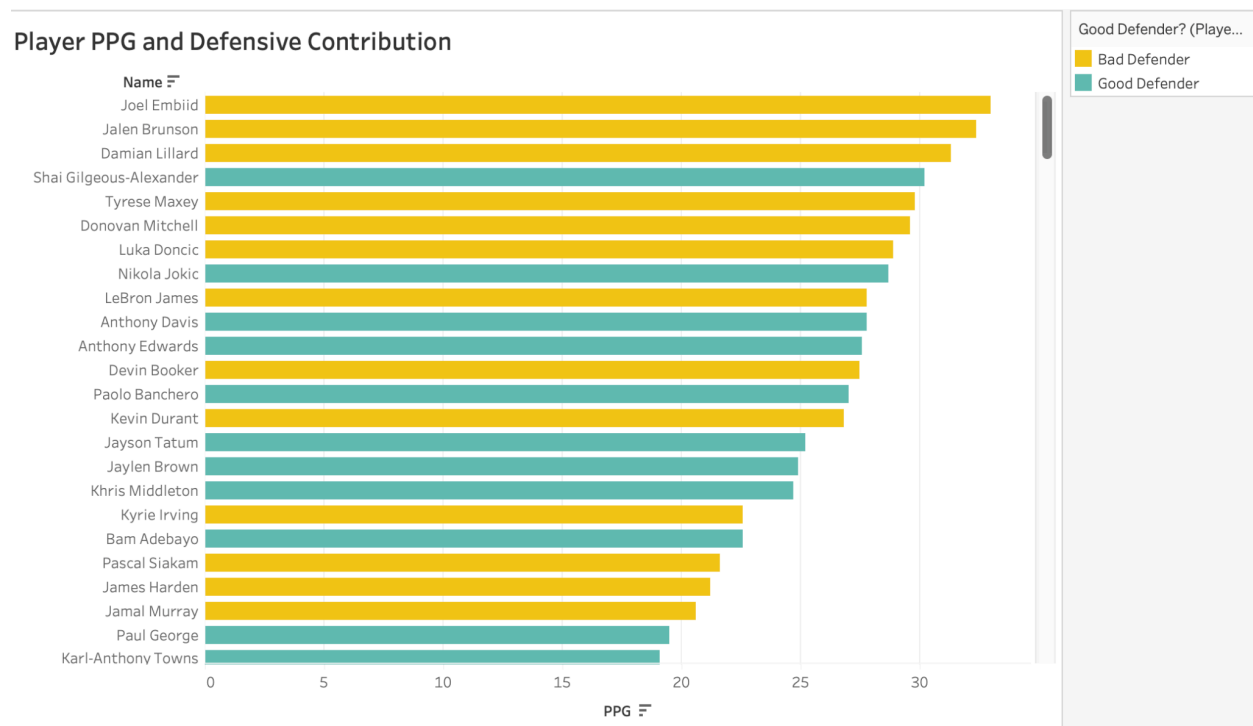


This visualization provides information on what teams were “performing exceptionally,” “performing terribly,” and which ones had “room for improvement.” This was done through the usage of two calculated fields. The first one found the difference between a team’s offensive rating and defensive rating, called net rating. The second one classified the net rating into one of the three categories by an “if-elseif-else” statement. If the team had a net rating of above 10 they were considered to be “performing exceptionally,” if they had a net rating less than 10 but above 0 they were considered to have “room for improvement,” and if they had a net rating below 0 they were classified as “performing terribly.” This is represented by the column on the left.

This wasn’t enough information, however, because it would not help the teams to assess what is exactly causing them to perform the way they are. This is why the second and third columns are there. The middle column shows the teams’ offensive ratings, using a calculated field to determine if their offense was “good” or “bad.” The column on the right shows the team’s defensive rating and uses another calculated field to determine if their defense was

“good” or “bad.” “Good” was represented by the color blue, and “bad” was represented by the color orange. These columns are useful because they can help teams see which area of their game needs to be improved, and they can focus on that issue specifically. This works well because, aside from the three teams that are “performing exceptionally,” each team has at least one area of their game that needs improvement

### Player PPG and Defensive Contribution:

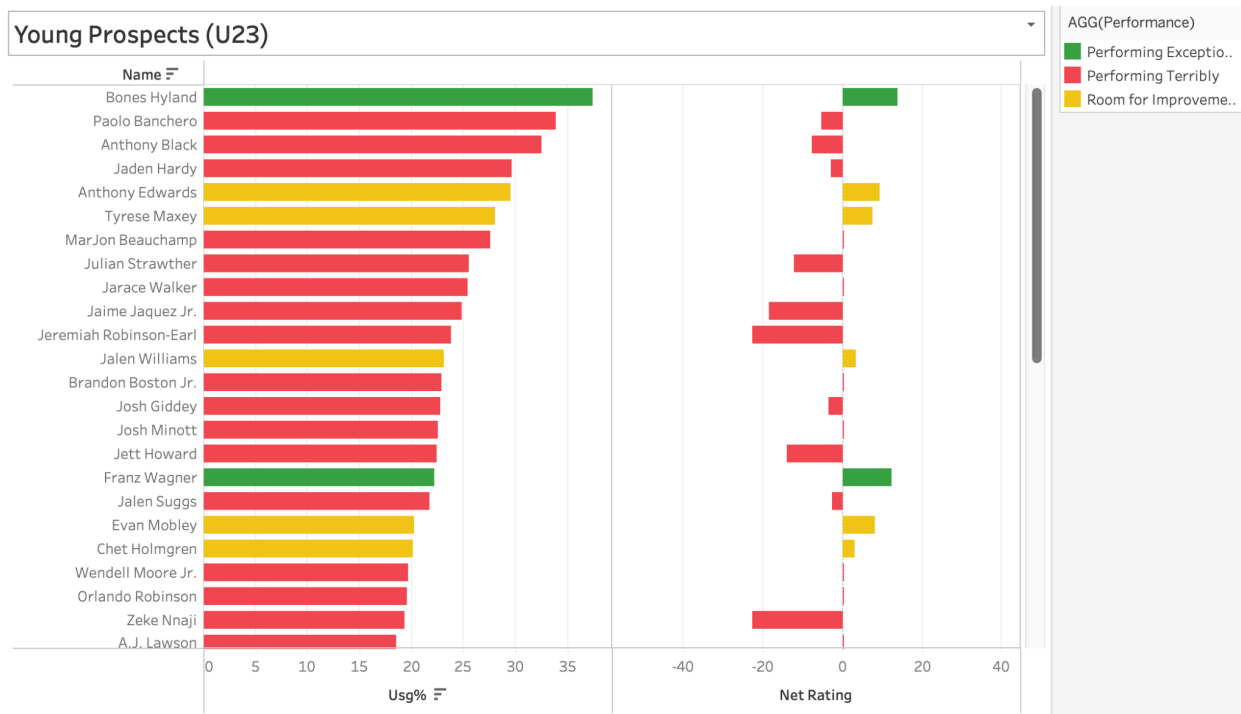


This visualization provides information on each player’s points per game, in descending order, and whether they were a “bad defender” or “good defender” during the 2023-2024 playoffs. A calculated field was used to classify players in one of the categories, taking into account their average defensive rating in comparison to the other players’ defensive ratings.

This visual is important to teams because it lists the best scorers during the playoffs in order, as well as considering their defensive impact. This can help teams identify balanced

players, who excel offensively (high points per game) while maintaining strong defensive capabilities, which are extremely valuable for building well-rounded rosters. This can also help teams highlight players who may score efficiently but need defensive improvement, helping them tailor training and strategies to address their players' weaknesses. Teams needing better defensive stoppers without sacrificing offensive output can also use the insights to recruit players. Finally, this can help teams better understand the strengths and weaknesses of opponents, which can aid in formulating defensive or offensive strategies during games.

### **Young Prospects (U23):**

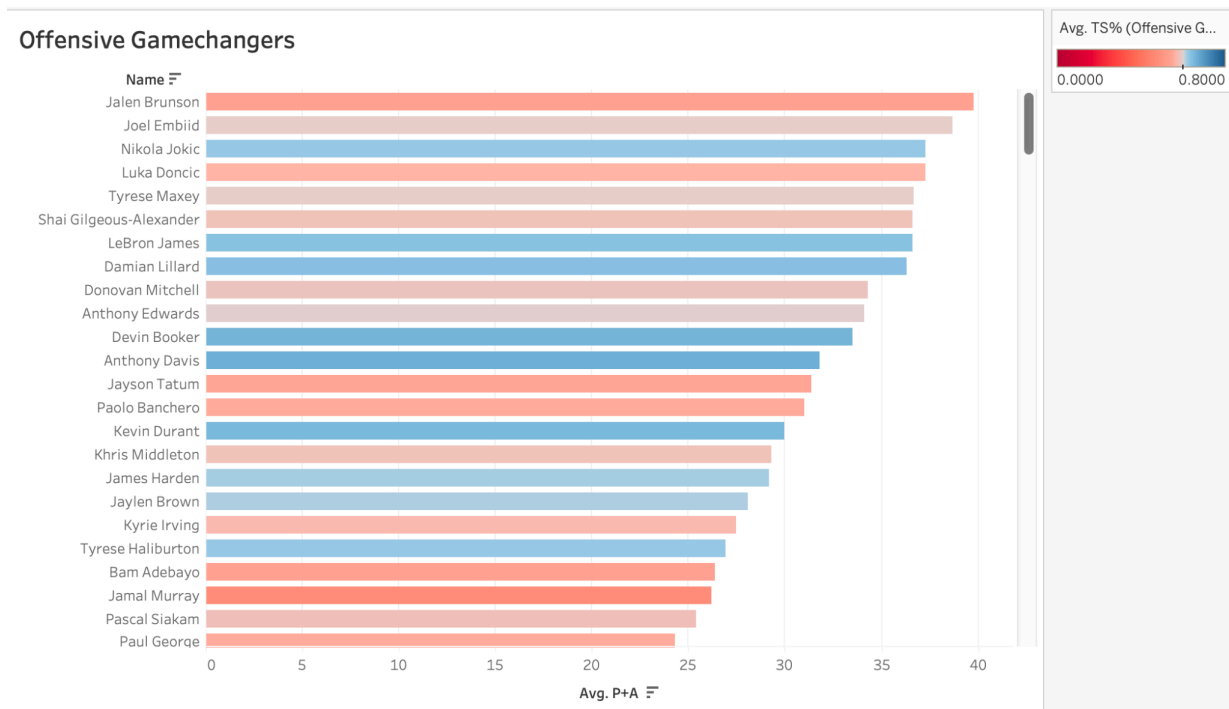


This visualization only focuses on “young prospects,” or players that are 23 years old or younger. The display on the left ranks the players by usage rate, with the highest usage rate being at the top. This display also uses the calculated field from earlier that classifies players as either “performing exceptionally,” “performing terribly,” or having “room for improvement,” based on their net ratings. The column on the right displays their net rating, for reference.

This visualization is important because it can help teams and analysts identify promising young talent and evaluate their performance potential. By focusing on players aged 23 or younger, the analysis targets individuals who are likely to improve and have long-term value for a team. Teams can pinpoint young players who already perform exceptionally, potentially giving them key roles or prioritizing their future development. Players categorized as having “room for improvement” provide teams with areas to focus on during training, coaching, or mentorship. Teams can also assess whether to invest more in developing certain young prospects or consider trading players who are underperforming significantly. By integrating net ratings and usage rates,

teams can better understand a player's impact on the court relative to their involvement in the game, helping make decisions about rotations and playing time. Overall, this visualization equips teams with actionable intelligence for building sustainable success through young talent development.

### Offensive Gamechangers:



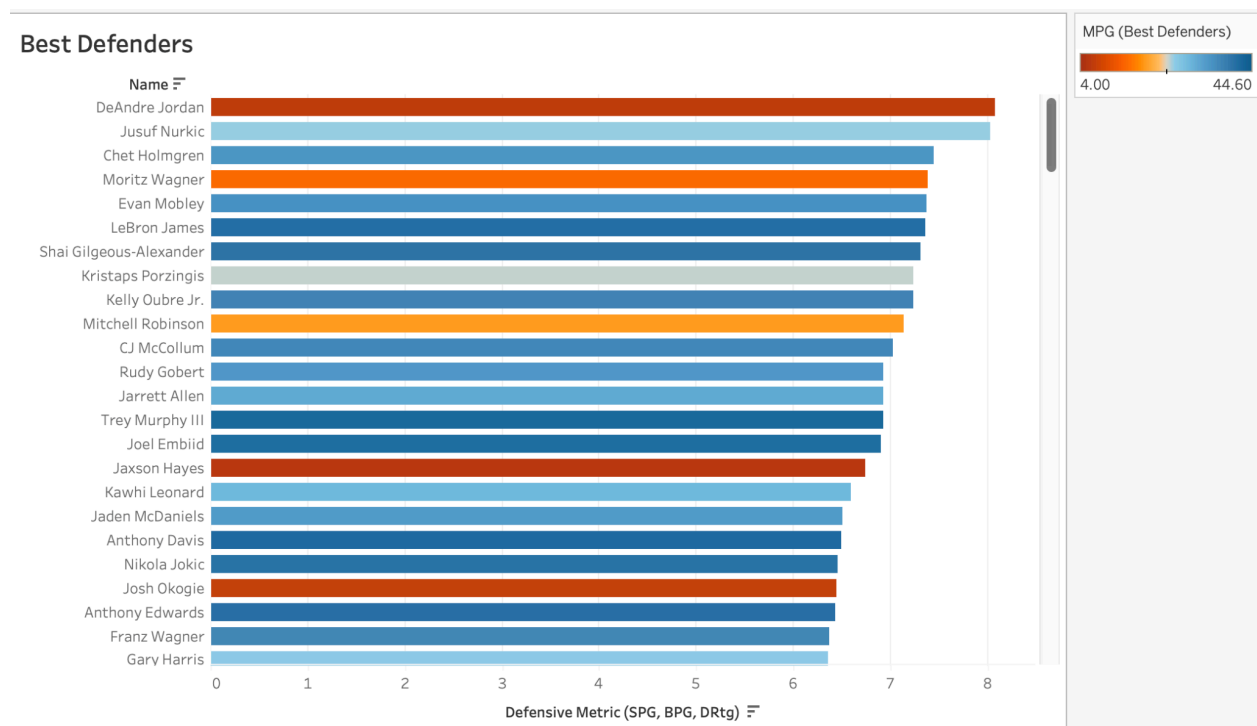
This visualization ranks players based on their average points + assists throughout the playoffs. They are also color-coded based on their average true shooting percentage, which takes into account their field goal percentage, three-point percentage, and free throw percentage. The redder the color is indicates a lower true shooting percentage, while a bluer color indicates a higher one.

This visualization can help teams and analysts evaluate players who have high levels of offensive production, while also highlighting their efficiency. By ranking players based on points and assists and color-coding them by true shooting percentage, teams can highlight players who



excel in both scoring and facilitating plays, making them invaluable assets on the offensive end. They can also use the true shooting percentage color coding to distinguish between players who score efficiently versus those who rely on volume rather than precision. This is crucial for understanding which players are most effective in high-pressure playoff situations. Teams looking to bolster their offense can target players with high points + assists combined with strong shooting efficiency, ensuring they add well-rounded offensive contributors. Coaches can also use this insight to design plays and rotations that maximize the impact of their most efficient offensive players. By integrating playmaking, scoring, and efficiency, this visualization provides a comprehensive view of players' offensive contributions, helping teams make informed decisions for roster improvements and in-game strategies.

## Best Defenders:



This visualization is intended to highlight the best-performing defensive players during the 2023-2024 playoffs. Firstly, players are ranked in descending order based on the defensive metric. This defensive metric is a calculated field that uses steals per game, blocks per game, and defensive rating. The average defensive rating was divided by 10, to make the numbers smaller and easier to digest, and, since a lower defensive rating is better, this value was subtracted from the combined averages of steals per game and blocks per game. This ended up with many people having a negative value for their defensive metric, so an arbitrary number of 15 was added to the value to ensure everyone had a positive value. Finally, players are color-coded based on how many minutes per game they averaged, with a redder color representing a lower number of minutes per game, and a bluer color representing a higher amount.

This is important because it allows teams to easily identify the best defensive players during the playoffs, while also providing context about their playing time. By ranking players with a calculated defensive metric and incorporating color coding for minutes per game, the ranking highlights players who excel in defensive contributions, helping teams identify key defenders to target in trades, free agency, or for strategic matchups. The color coding provides insight into how much playing time these players received, helping teams assess whether their defensive impact could be amplified with increased minutes or if their performance is sustainable over longer periods. Coaches can also use this information to better balance rotations by pairing strong defenders with offensive-minded players, creating a more cohesive lineup. Understanding which players were most effective defensively in the playoffs also helps teams plan for future matchups by countering or emulating these defensive strategies. By combining a comprehensive defensive metric with playing time data, this visualization offers a detailed view of individual

defensive performance, which is essential for teams aiming to strengthen their defensive identity or address specific weaknesses.

### **What Were the Findings?**

Team performance during the playoffs varied significantly depending on their balance of offensive and defensive capabilities. Teams like the Pelicans (Nor), the Cavaliers (Cle), and the Lakers (Lal) had low net ratings, indicating that they are not performing well. Besides the top three teams, each team either struggled offensively, defensively, or both. For example, the analysis shows that the Pelicans had a good defensive rating, but it also shows that their offensive rating is bad, suggesting that the main focus for the Pelicans should be to work on defense. In contrast, the Lakers had a good offensive rating but a bad defensive rating, suggesting that their defense is poor.

Key contributors based on points per game such as Joel Embiid, Jalen Brunson, and Damian Lillard, but analysis indicates that they are also bad defenders. Looking at the players' points per game and defensive contribution, Shai Gilgeous-Alexander, Nikola Jokic, and Anthony Davis have the highest points per game in addition to being good defenders, indicating that they are well-balanced players.

In addition, the data highlights promising young players such as Bones Hyland and Franz Wagner who were both performing exceptionally well compared to the others and had a significant contribution to their teams.

Players such as Jalen Brunson, Joel Embiid, and Nikola Jokic were considered to be offensive game-changers, excelling in points and assists. Only certain players, however, managed to combine high offensive output with impressive efficiency, as indicated by their true shooting percentages, such as Nikola Jokic, LeBron James, and Damian Lillard, to name a few.

The true shooting percentage metric helped differentiate between players who score efficiently and those who rely on volume shooting, providing clarity on who could deliver in high-pressure situations.

Using the calculated defensive metric, players like DeAndre Jordan, Jusuf Nurkic, and Chet Holmgren stood out as some of the most impactful defensive players. Their high rankings were supported by a strong combination of blocks, steals, and low defensive ratings. Additionally, color-coding based on minutes per game revealed which players' contributions were sustainable over extended playtime. For instance, players with higher defensive metrics who also averaged significant minutes, such as Chet Holmgren, LeBron James, and Shai Gilgeous-Alexander, demonstrated consistency and reliability. On the other hand, although DeAndre Jordan ranked first in the defensive metric, he did so on a very low amount of minutes per game, raising questions if this could be maintained over a longer period of time.

Overall, these analyses and visualizations help to highlight balanced players who excel on both ends of the court, as well as specialists who dominate in specific areas.

### **What Can We Do With This Information?**

This information provides actionable intelligence for teams to enhance performance and make strategic decisions. Teams with an imbalance in offensive and defensive ratings, such as the Pelicans or Lakers, can prioritize improvements in their weaker areas through training, tactical adjustments, or roster changes. Underperforming teams may conduct roster evaluations to address gaps in key performance areas. For example, defensive stoppers could address the Lakers' needs, while offensive game-changers could benefit the Pelicans. During trades or free-agent acquisitions, teams can prioritize players who excel in areas of weakness, ensuring targeted roster upgrades.

Teams already performing well may focus on acquiring balanced players who are not liabilities on either side of the ball, helping them maintain or improve their net rating. Promising young talents like Franz Wagner and Bones Hyland can be nurtured or acquired to ensure long-term growth and stability. Teams can create tailored development plans for these prospects that enhance their skills over seasons.

Beyond recruitment, coaches can leverage these insights to maximize player strengths by using defensive metrics and scoring efficiency data to design better game plans and rotations. Players with high true shooting percentages but lower usage rates can be integrated more effectively into offensive schemes, ensuring their contributions are maximized. Offensive players with defensive shortcomings can undergo targeted training to become more well-rounded contributors, while promising defenders can receive offensive coaching to boost their versatility.

Coaches can also make strategic in-game adjustments, such as pairing offensive stars with defensive specialists to balance the floor during critical moments. By addressing these areas, teams can build rosters and strategies that capitalize on the strengths of both offensive and defensive leaders.

By adopting this data-driven approach, teams can make informed decisions, through recruitment, development, and game planning, that not only address immediate needs but also set the foundation for sustained success in future seasons and playoff campaigns.