

Table of contents

• 1. <u>Introductory notes</u>

• 2. <u>Metrics</u>

• 3. Advanced insights

• 4. Future work possibilities



Introductory notes

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"Offense sells tickets, defense wins championships" is probably one of the most well – known quotes in sports, which highlights the importance of the defensive phase of the game.



This project aims to mark exactly that by providing an extensive analysis of **Dinamo București**'s future opponents and also a comparison between the team and the rest of the league with different metrics and insights that can help lead to improvement.

Introductory notes



• The 3 most important questions that this analysis answers are:

• What are the most vulnerable teams in the league?

• What are the most important defensive actions to look at for every team?

• What are the strengths and weaknesses of the team's defensive plays?



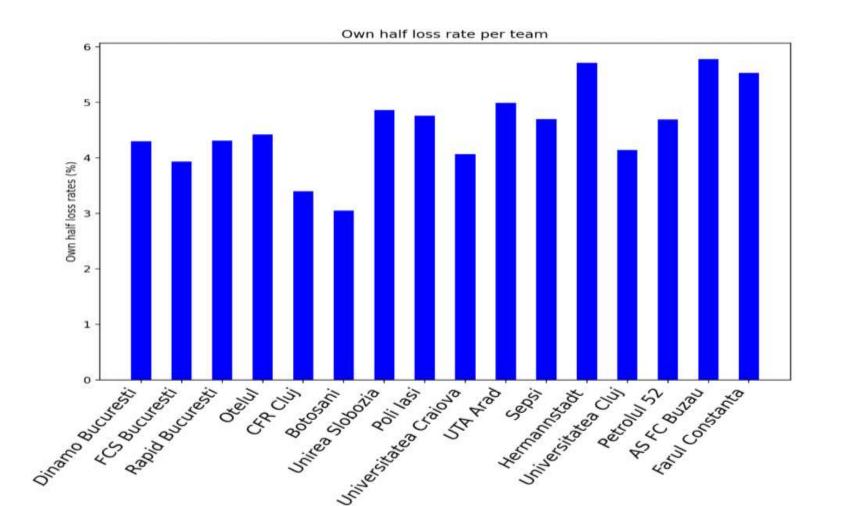
Dangerous own half loss rate (with respect to the league average)

This metric tells us the percentage of dangerous own half losses a team had.

A higher rate indicates that a team is prone to committing errors in their own half, while a lower rate indicates that the team has high control in its own half.



Own half loss rate across all teams



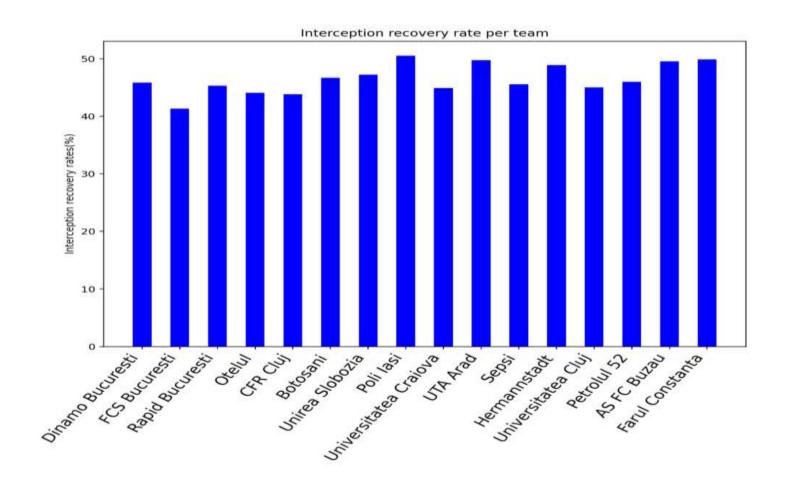
Interception recovery rate (with respect to the league average)

This metric allows us to see the percentage of ball recoveries made through interceptions only. If a team has a high intercept recovery rate, team pressure can be taken into account by the opponent.

Contrary, if a team has a low intercept recovery rate, the opponent can use link up plays and make them vulnerable.



Interception recovery rate across all teams

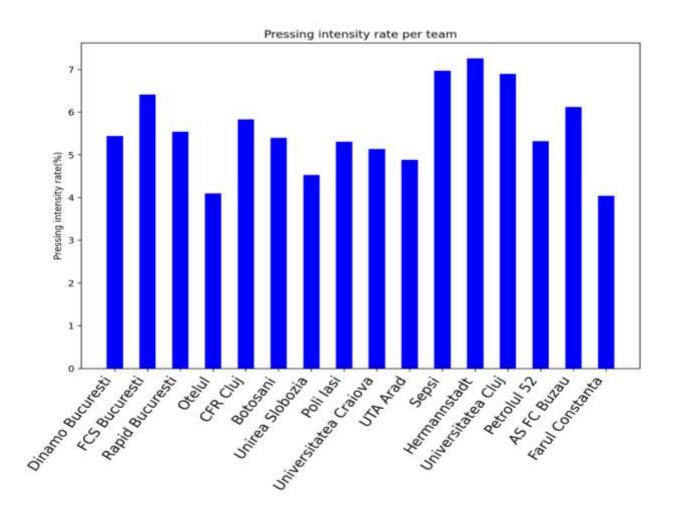


Pressing duels intensity rate (with respect to the league average)

This metric can tell us how many duels were created through pressing, giving an overview of which team is a high pressure one and which team is a laid back patient one.



Pressing duels intensity rate across all teams



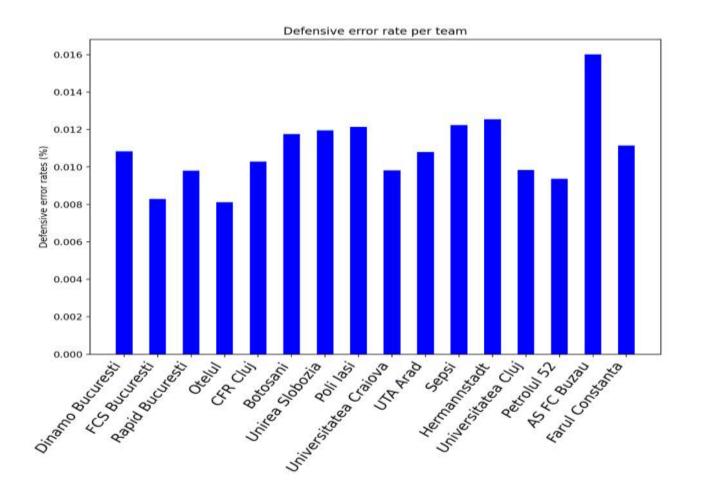
Defensive error rate (with respect to the league average), also one of the most subjective metric

It takes into account the number of goals that a team conceded and the number of total successful actions across the season: if the error is high, the team is inneficient in defense and can be forced into mistakes.

On the other hand, if the error is low, the team is efficient in defense and the mistakes are very rare with them.



Defensive error rate across all teams



Team profiles

Based on the metrics presented and the conclusions drawn, there can be generated a draft of a team profile, that can be filled with suggestions and details about every team's performance.

This team is not defensive error prone. They have an error rate of 0.008292303705623219% and mistakes are rare with them ,This team does not lose the ball that often in its own half, with a loss percentage of 3.93%, proving that the team has a high control in its own half ,This team is very good in 1 on 1 defensive situations, with a 25.1% of won duels ,This team is below the league average when recovering the posssesion by interceptions, with 41.33%. They can be vulnerable against successful link up plays ,This team is a high pressing one. Watch out for their intensity and try to not lose the ball. Try to force them into a mistake and catch them off guard

Team profile example for FCSB.



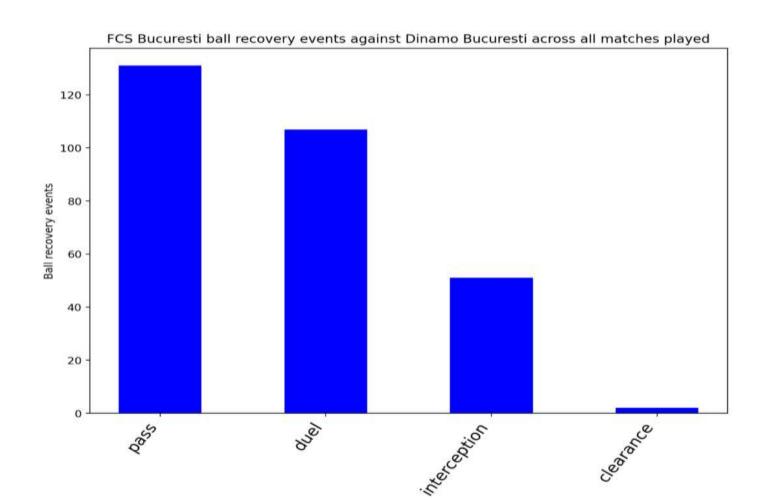
Advanced insights

Ball recovery events

One of the advanced insights of this project is covered by the ball recovery events, which are essential in the analysis due to the fact that they represent a key component of the opponent's defense.



Ball recovery events for an opponent

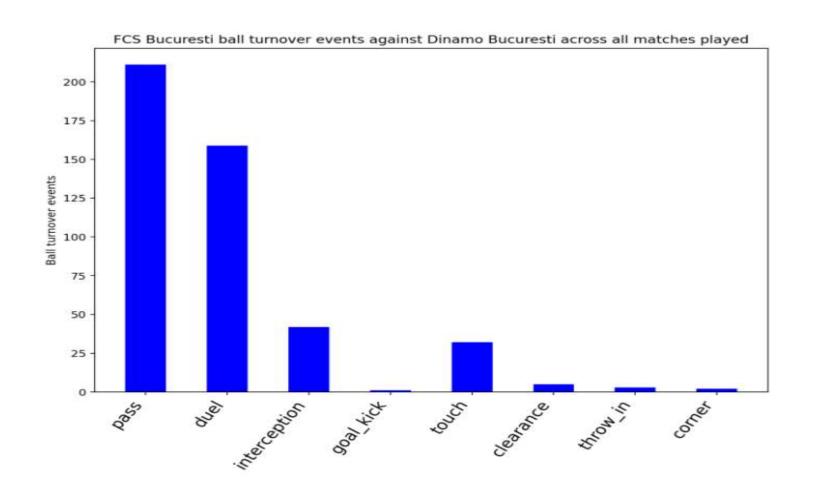


Ball turnover events

The second advanced insight of the project is the opposite action of ball recovery: ball turnover. This is once again essential, allowing us to see how our team behaves in defense and which vulnerabilities does the opponent have.



Ball turnover events for an opponent

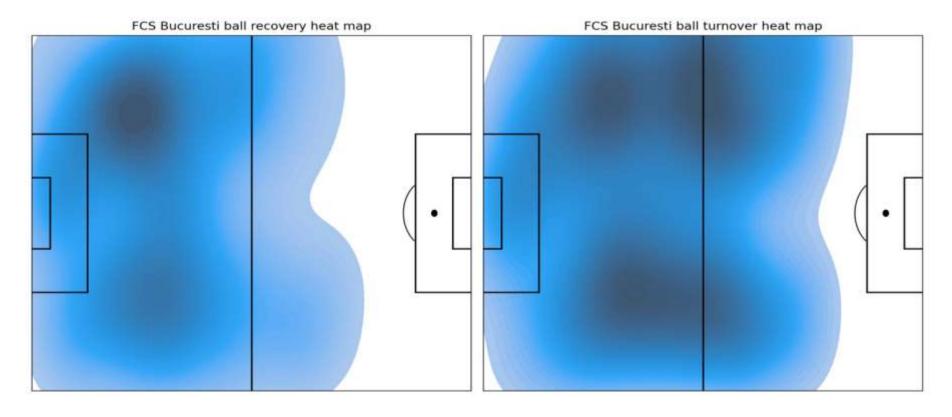


Heatmaps

• The final insight withdrawn for this project is corelated to the previously mentioned ones (ball turnovers and ball recoveries) and represent a visualization of the pitch and where do the events happen frequently.

• The heatmaps were generated for every team Dinamo București has played against in the last season

Heatmaps



Example of a heatmap for all the matches Dinamo București has played against FCSB.



Future work possibilities

Future work possibilities

• Regarding future work possibilities, there are different ways in which this project can be extended.

• An example would be the usage of different Machine Learning algorithms based on the metrics that were created, so that the team profiles would be even more insightful.

• Another example would consist of using tracking data and Computer Vision algorithms that can help generate insights in real time

Thank you for your attention!