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Why xG Matters

Why xG Matters

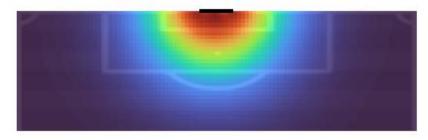
- xG (short for expected goals) measures the quality of a shot through looking at prior shots
 - This is essentially a probability that a shot is a goal
 - Viewed as an objective way to measure chance quality
- Ideally the Bolts want to be taking as many shots as they can with high xG and limiting the number of shots with low xG
- In this report, I will investigate our shot quality based on this metric and try to give context surrounding shot selection

Building an xG Model

Boston Bolts xG Model

- Here is the overall expected goals model for the Boston Bolts
- This tells us that there is a high probability of scoring goals within the 6 yd box (around 0.5 to 0.6 xG) − big surprise here ©
- Interestingly, as shots are registered from further outside the penalty area, the xG drops rapidly to around 0.1
 - Shots from outside the box that are in the wide spaces have a very low probability
- Overall, this gives me an idea that we may be taking too many shots well outside the box or in wide areas outside the box

Heatmap of Expected Goals For Boston Bolts

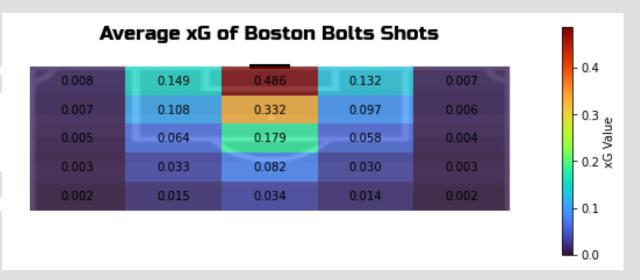


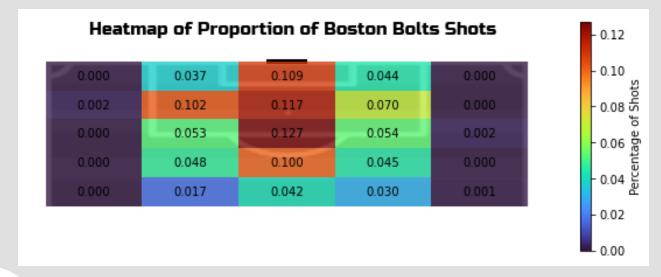
0.2

0.1

Heatmaps of Proportions of Shots and xG

- This is a side-by-side heatmap comparison of xG and percentage of shots
- As a club, we do a pretty good job of shooting from central areas and high value xG areas
- However, while this can be a difficult task, there is some room for improvement in taking less shots from outside the box, especially in wide areas



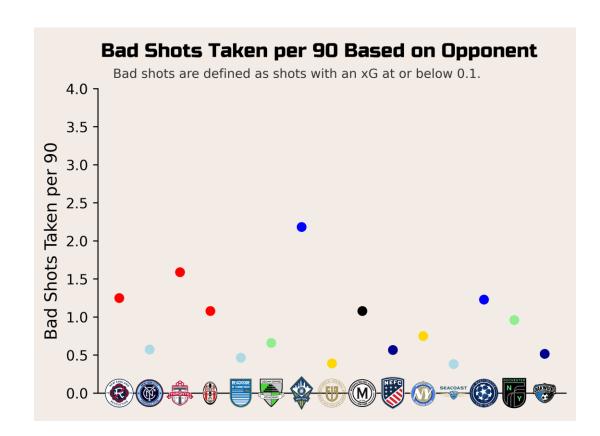


Investigating Relationship Between Opponent and LowQuality Shots

DO OPPONENTS CORRELATE WITH MORE LOW-QUALITY SHOTS?

Opponent Quality

- Here we are looking to see if our opponent has any effect on lower quality shots
- There is not really any effect that opponent's have on bad shots
 - It seems like we slightly take more xG shots with a low value against better opponents, but there's not much of a relationship here
- This was sorted using a basic competition adjustment, so it would be interesting to have a conversation about rating opponent quality in more detail



Overall Data Summary

This tableau dashboard provides a summary into each teams finishing based on areas of the pitch and type of shot. You can use this dashboard to find strengths and weaknesses within your teams finishing or use this as support for finishing drills in certain areas or with certain shots.

FinalTable | Tableau Public

Key Takeaways

- As a club, we generally do a good job of taking shots in central areas
- However, there are improvements that we can make with shot selection in wide areas outside the box and central areas far outside the box
- Possible Influencers of xG
 - Opponents, time, and game state all have no/little relationship with taking worse shots