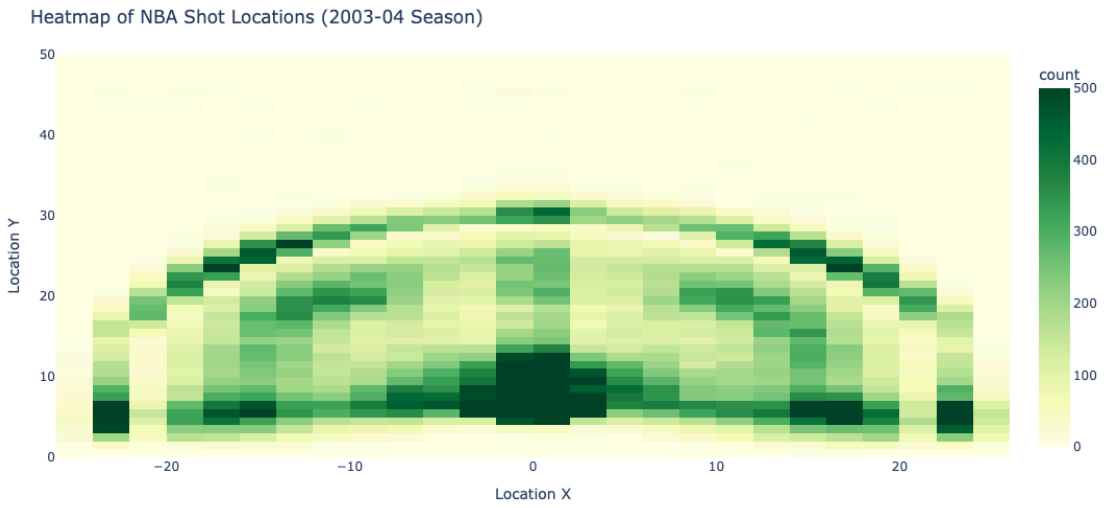
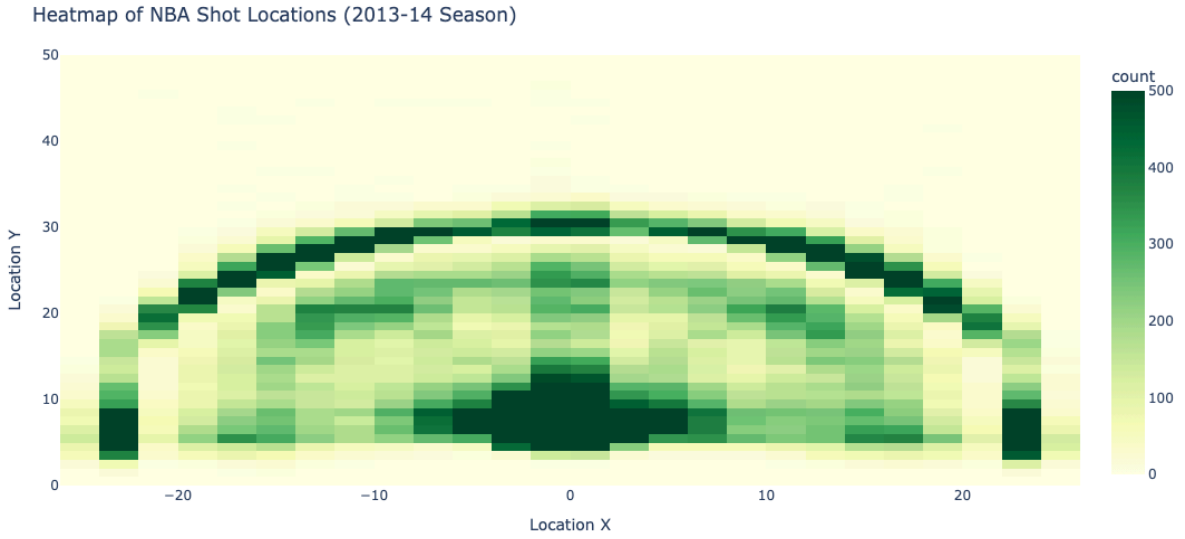
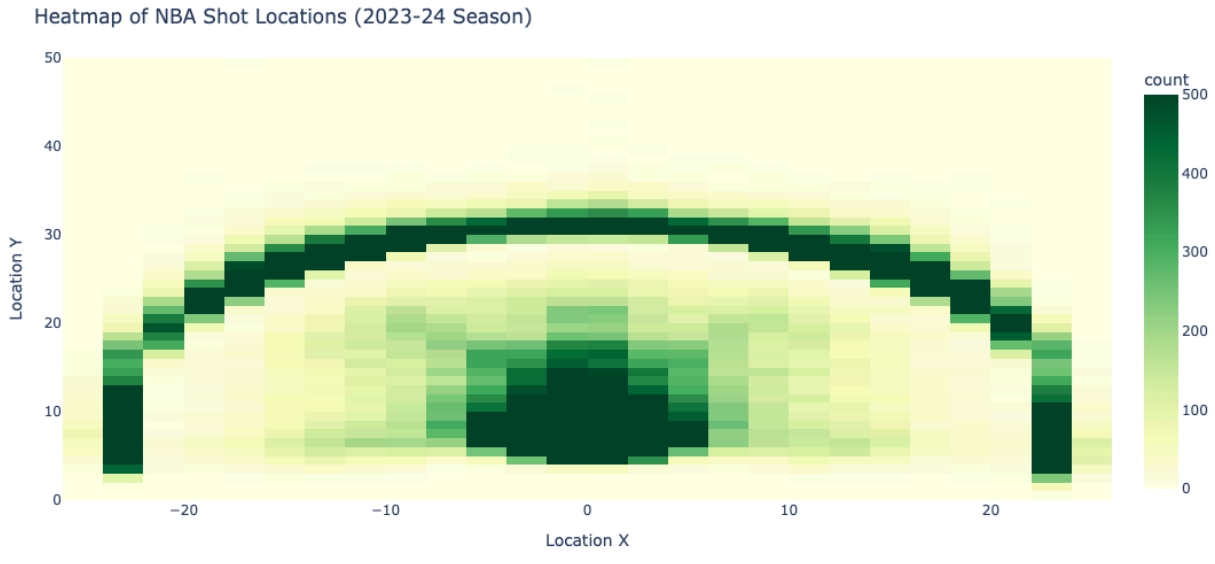
Trends in Shot Data from NBA Seasons 2003-04 to 2023-24

After creating a heatmap of all shots taken at the beginning of our dataset (2003-04), halfway through (2013-14), and at the end (2023-24), a pattern emerges.

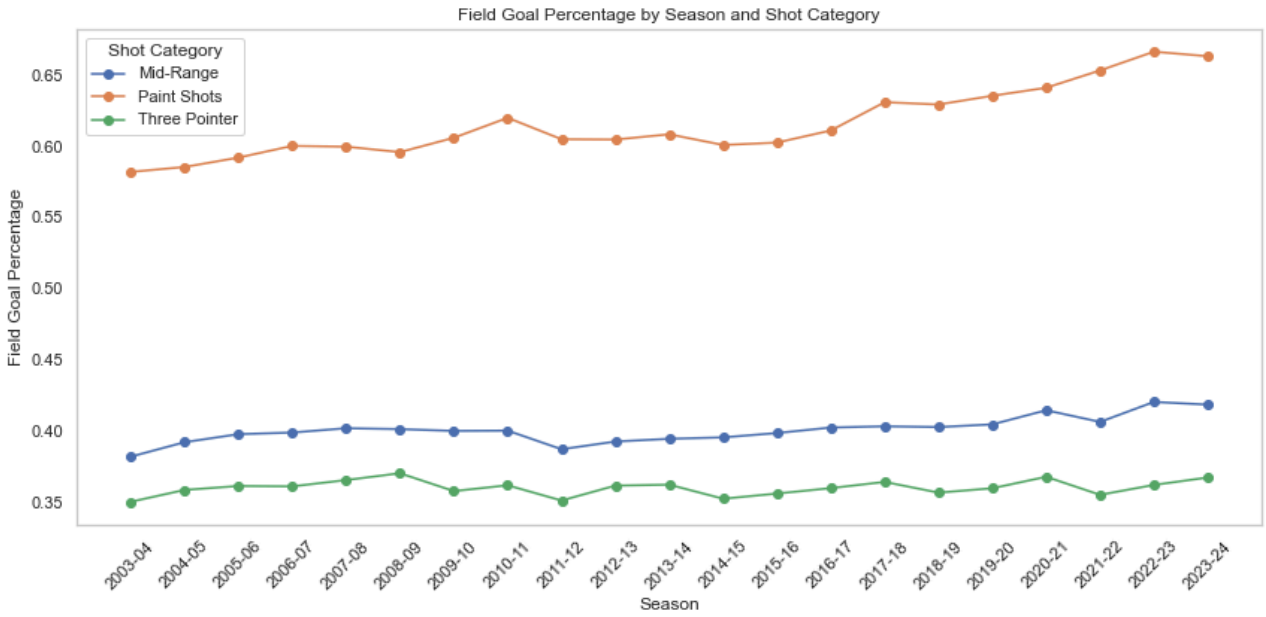


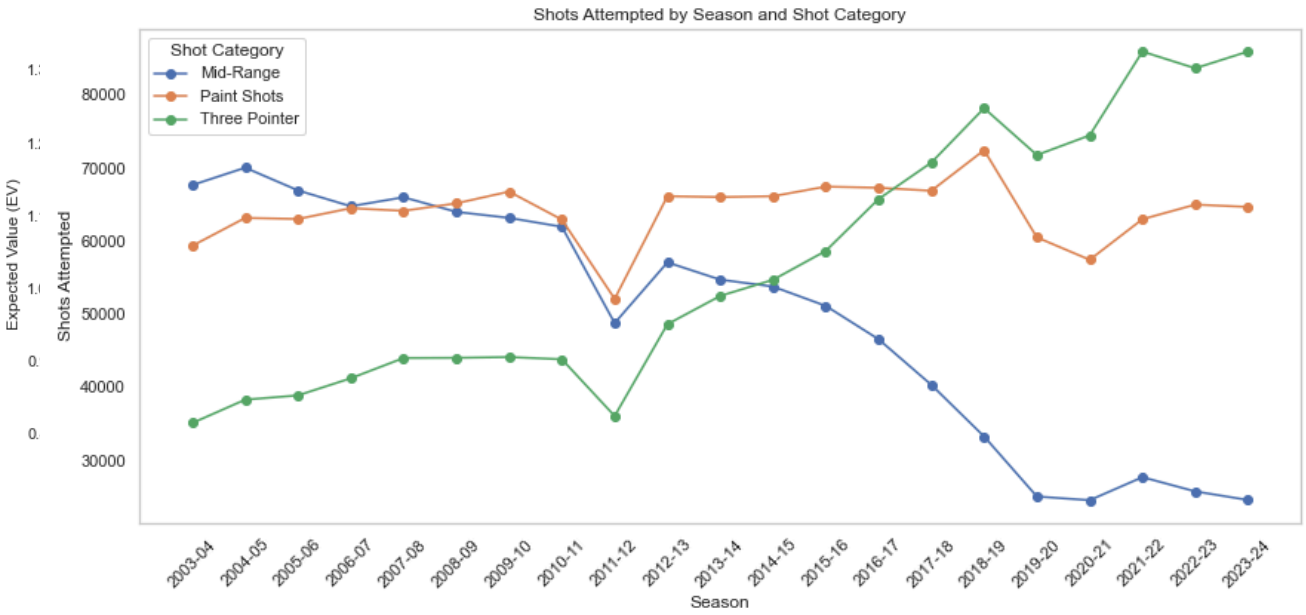




The Death of the Mid-Range

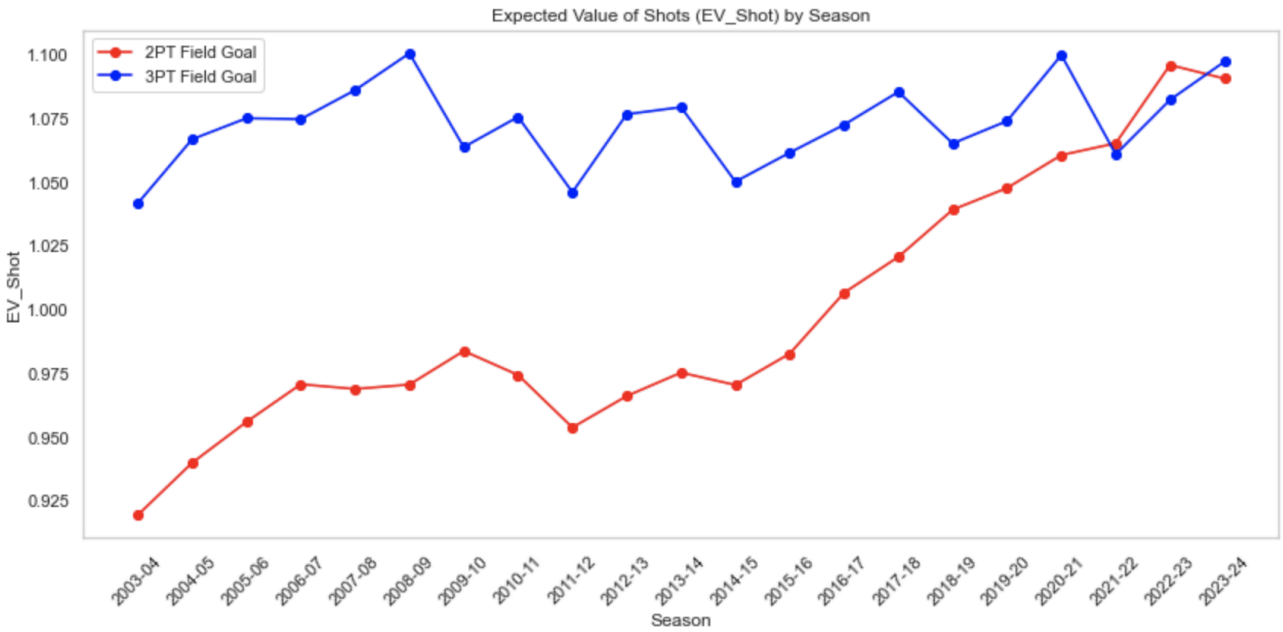
Mid-range attempts dropped significantly, while paint shots remained steady and three-pointers increased sharply. This shift did not necessarily result from significantly higher or lower shooting percentages in any area.





On an expected value per shot attempt basis (FG percentage × point value of the shot), the mid-range is a much less efficient option.

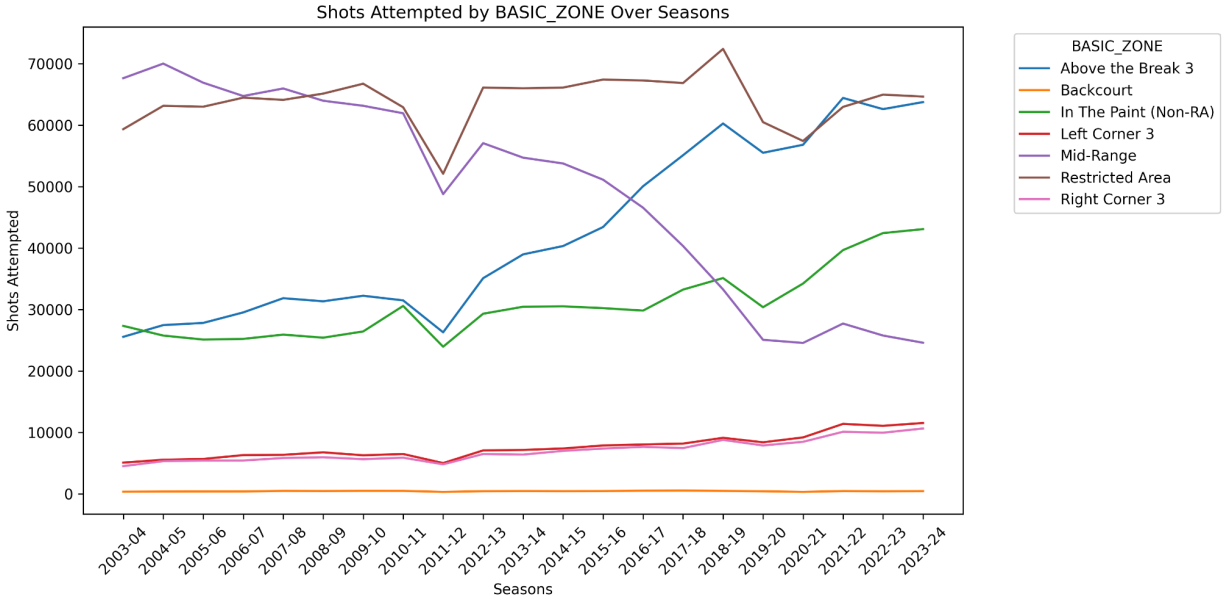
I believe organizations recognized this and began encouraging players and offensive systems to prioritize higher-value, more efficient shots.

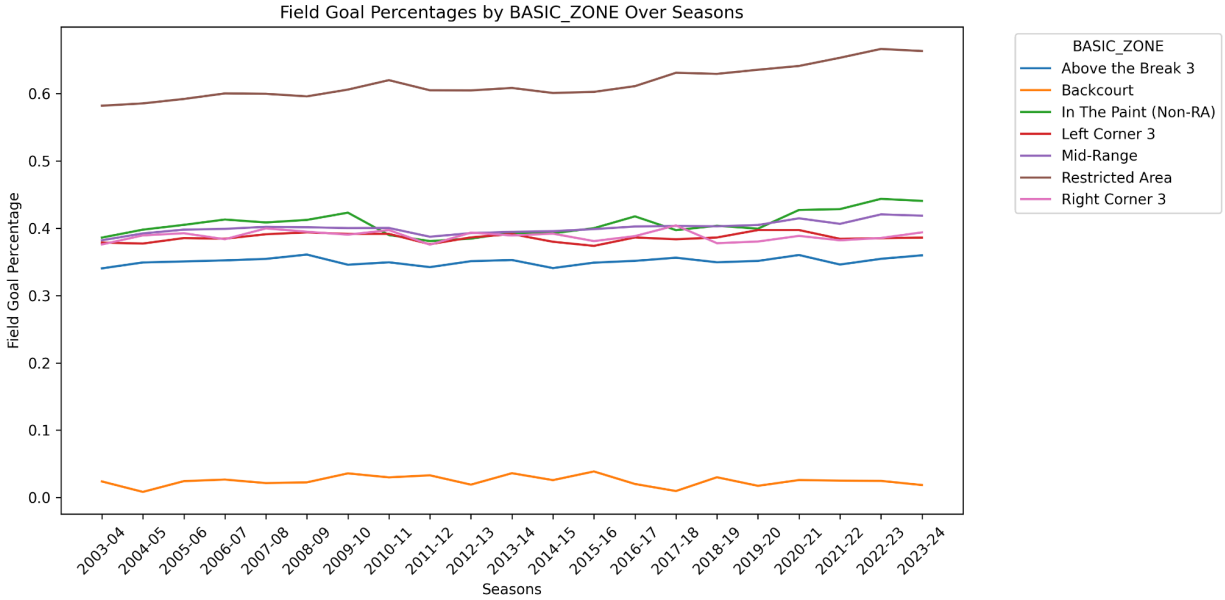


So why is the expected value of 2-point field goals rising so rapidly?

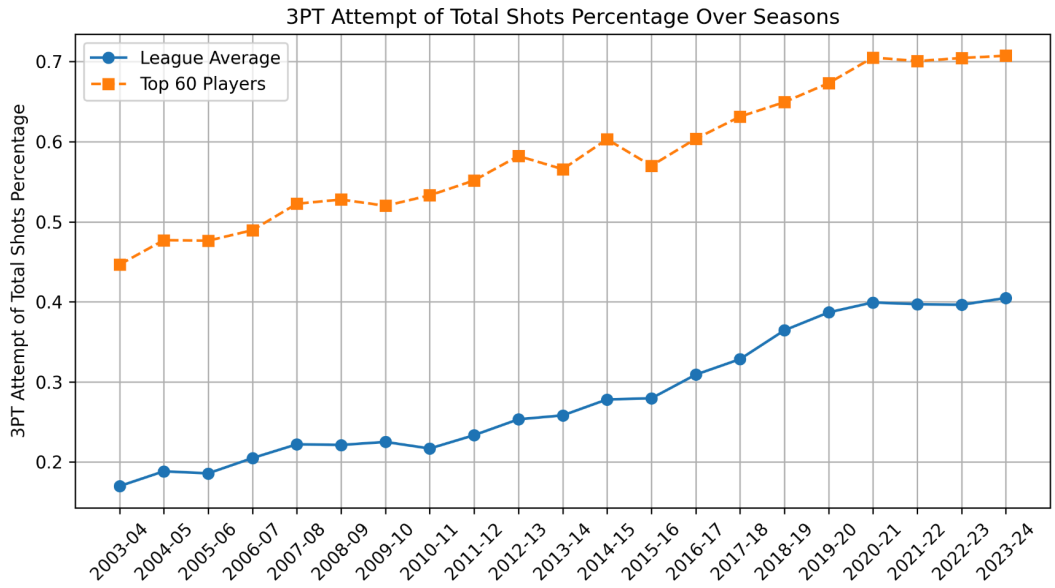
Again, we return to the theme of the mid-range. Since 2012, there has been a massive drop in mid-range attempts, which directly correlates with the increase in the expected value of 2-point field goals.

As mid-range shots—an inefficient option—have decreased, the overall efficiency of the 2-point field goal category has risen.

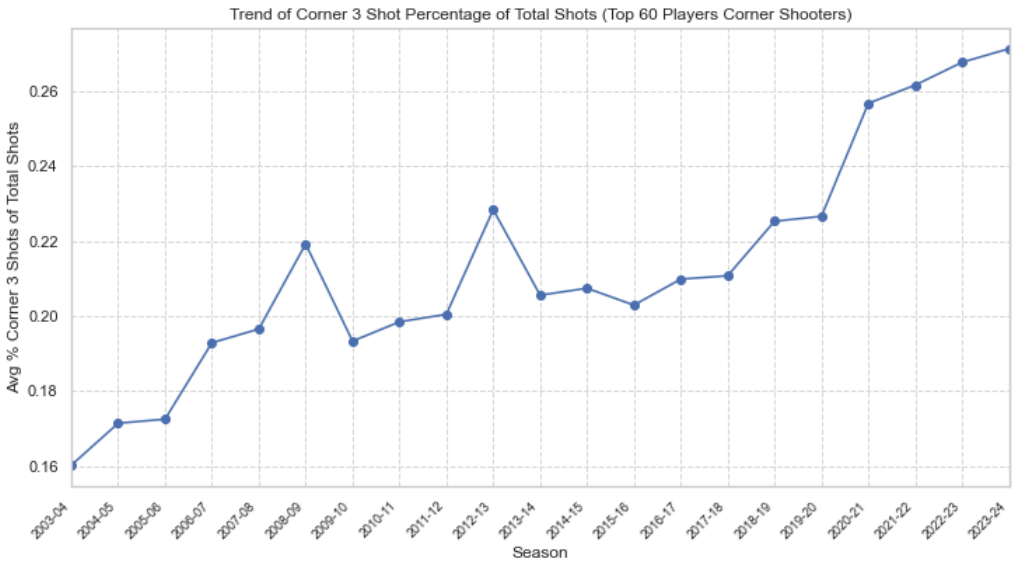




The Rise of Three Point Specialists



The share of three-pointers as a percentage of total shots has increased over the years for both the league average (minimum 100 shot attempts) and the top 60 three-point specialists.



This trend has also fueled the rise of niche players, such as corner three-point specialists.