REQUEST TO PERFORM FURTHER TEAM LINEUP ANALYSIS

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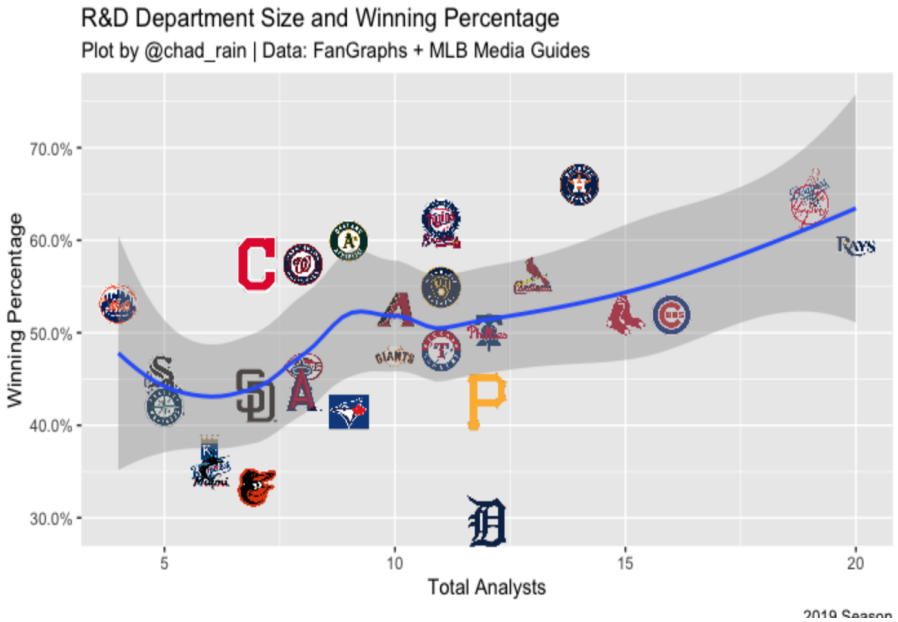
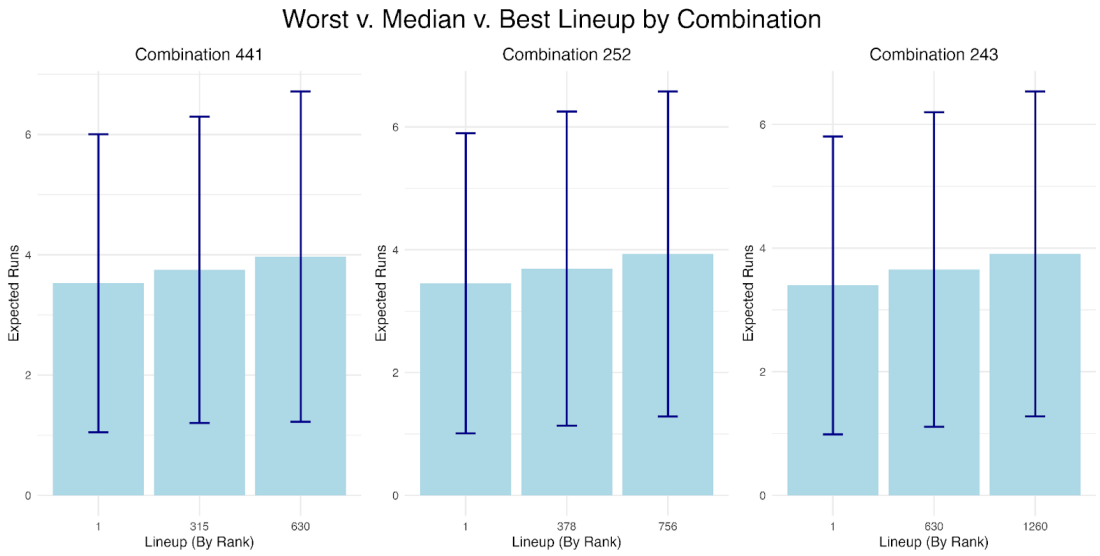
In the last 20 years, statistical analysis has become an incredibly important tool in baseball decision-making. While the analytics era in baseball has involved considerable disagreement regarding the best approach to baseball strategy, it is important to note that the increase in the importance of analytics is due to the fact that it works. Below is a chart highlighting the positive correlation between research and development department sizes and winning percentage for each of the 30 MLB teams for the 2019 season.



One of the most important game-to-game decisions in baseball is setting a lineup order. The success of a lineup can strongly depend on the order of hitters, especially in ordering hitting styles to maximize runs. To give clarity to this decision, we categorized hitters from the 2022 MLB season into the three major hitter types: contact, middle, and power. Then, we simulated thousands of baseball games using statistics from the 2022 season, taking combinations of these three hitter categories and shuffling them to find which lineup orders are expected to score the most runs per game.

Our model is effective, as we found a clear distinction between the best and worst lineups, given a fixed number of contact, middle and power hitters in the lineup. Below is a chart highlighting this distinction for the lineup combinations 441, 252, and 243, the numbers reflecting the number of contact, middle, and power hitters in each lineup, respectively. Although the difference between the best and worst lineups might not appear extraordinary in this chart, seemingly small differences in expected runs scored per game can lead to drastic differences in results.



We applied our model to the Yankees 2022 opening day lineup, which we identified as having the lineup order: power, middle, middle, power, contact, power, middle, middle, contact. Our model indicates that for a lineup with 2 contact hitters, 4 middle hitters, and 3 power hitters, the optimal lineup is in the order: contact, contact, middle, power, middle, middle, power, middle, power. While manager Aaron Boone's lineup decision was near the middle of the pack in our model, with an expected runs per inning of 0.407, our optimal lineup has an expected runs of 0.434, a 0.0027 difference. This difference, extrapolated and scaled over an entire season, represents an approximately 60 run difference, vaulting the Yankees over the Dodgers for the most runs in the MLB. Not only would this run increase reflect an improvement in team hitting, it would likely be followed with an increase in ticket and merchandise sales.

We strongly believe our model can directly contribute to an improvement in MLB lineups and urge you to approve funding into and adoption of our analysis. Thank you for your time.