Codebook for Final Pollster Ratings (Z-Score Rescaled)

Steps from Raw Data to Final Z-Score Rescaled Ratings

1. Initial Rating Calculation:

   - An initial rating was calculated for each poll based on how accurately it predicted the seats for NDA, UPA, and Others.

   - The formula used was: Accuracy = 1 - |(Actual - Predicted) / Actual|.

2. Time Factor:

   - A logarithmic time factor was introduced to account for how far the poll was conducted from the election date.

   - The formula used was: Time Factor = log(1 + 0.005 * Days between poll and election).

3. Adjusted Rating:

   - The initial rating was adjusted using the time factor.

   - The formula used was: Adjusted Rating = min(10, Overall Accuracy * Time Factor * 20).

4. Pollster Summary:

   - For each pollster, the mean of the adjusted ratings was calculated.

5. Z-Score Normalization:

   - The mean ratings were standardized using Z-Score normalization.

   - The formula used was: Z = (X - Mean) / Standard Deviation.

6. Fine-Tuned Z-Score Rescaling:

- The Z-Score normalized ratings were rescaled to fit between 0.75 and 1.25.

- The formula used was: Rescaled Z-Score = 0.75 + (1.25 - 0.75) * (Z - Z_min) / (Z_max - Z_min).

Simple Explanation

We took each poll's predictions and checked how close they were to the actual election results. We then adjusted these ratings based on how long before the election they were made. After that, we averaged these adjusted ratings for each pollster. Finally, we used a standard way of measuring how unique each pollster's average rating was compared to all pollsters. We then fine-tuned these ratings to fit between 0.75 and 1.25.

Detailed Explanation

We started with the adjusted ratings calculated using a composite of the Absolute Percentage Error and a time-decay function. The mean of these ratings was calculated for each polling agency. The Z-Score normalization was applied to these means to standardize them. The Z-Scores were then rescaled using Min-Max scaling to fit within a predetermined range of 0.75 to 1.25, providing a final rating that accounts for both accuracy and the distribution of ratings among all pollsters.