Executive Summary

Overview

The Scatter plot analyses and shows correlation of the relationship between Votes received by Candidate and Length of Name of Candidate. There are **two sections of charts** in Chart.pdf. The First Chart shows the Scatter plot for **all election years combined** representing the correlation. The second chart shows the **year wise scatter plot from 1962 to 2022**.

General Trends:

[1] There is a **little or no** correlation between the name length of the candidate and the vote received by them. The distribution of the votes is fairly scattered and doesn't count as a major factor in vote count.

[2] The Observation indicates that the scatter plots across years are fairly spread and distributed suggesting that length of name may be long or short across the years but voters took in consideration other crucial factors rather than length of name to cast their vote to Candidates.

Interesting Observations from Scatter plots of Individual year:

[1] Patterns Observed:

[1.1] Distribution in Years 1962, 1972, 1980 : The Distributions of scatter plot for the years suggest consistent spread with no correlation. Scatter plots are dense and concentrated around 10 to 25 characters with no clustering, data points are evenly scattered.

[1.2] Distribution in Year 1967, 1975, 1985: A slight increase in variability might be observed, with a similar distribution as previous years but little increase in outliers with higher or lower votes. Votes are concentrated at name length 15 to 35 characters. Yet the lack of correlation persists. Votes do not show any insightful dependance on name length.

[1.3] Distribution in Year 1990, 2002: Increased Variability with Outliers.

The Scatter plot shows wider variability in vote counts across different name lengths and more frequent outliers. The election in these years reflect a broader distribution of votes across name lengths but no clear trends, Also highly dispersed vote distribution indicate diverse candidates. the presence of the outliers indicates that factors other than name length drive vote count.

[1.4] Distribution in Year 1995, 1998, 2007: These have a higher variability with a significant amount of outliers affecting. Votes are spread across name lengths and distribution is more scattered. These years show the most diverse patterns with a high number of outliers.

[1.5] Distribution in Year 2017, 2022: The distribution for these years is highly variable with dense clusters around certain name lengths and numerous outliers. There is a wide spread of vote counts across various name lengths. With a complex distribution of votes suggesting that name length is an insignificant factor. The presence of dense clusters suggests that elections may be influenced by other crucial factors.

Conclusion:

No Significant Correlation: Across all years, there is no strong or consistent correlation between the length of a candidate's name and the number of votes received. The scatter plots show a random distribution of votes across various name lengths.

Consistent Patterns: Similar scatter plot shapes across multiple years indicate that the relationship between name length and votes **remains stable over time**, with no emerging trend suggesting name length impacts electoral outcomes.

Increased Variability in Later Years: Over time, particularly in the **1990s and 2000s**, the plots show **increased variability and more outliers**. This suggests that elections became more diverse, with voting outcomes less predictable and less dependent on superficial factors like name length.

Diverse Factors at Play: The presence of outliers and the broad distribution of votes across different name lengths indicate that other factors such as **political strategy, candidate appeal, and media influence** are more critical in determining vote counts than the length of a candidate's name.

Overall this indicates that there is **little or no impact** of name length on vote count. Indicating no correlation between two.