POLITICAL JUGGERNAUTS: A QUANTITATIVE ANALYSIS OF CANDIDATES IN THE 2019 LOK SABHA ELECTIONS

Introduction:

The 2019 Lok Sabha elections in India were a watershed moment in the country's democratic history, witnessing one of the largest exercises in electoral democracy globally. With over 8,000 candidates contesting for parliamentary seats, this election reflected the vibrancy and diversity of Indian democracy. "Political Juggernauts" is a comprehensive analysis project utilizing the power of data and the visual capabilities of Tableau to delve into the quantitative dimensions of these elections.

Project Purpose:

The purpose of "Political Juggernauts" is to conduct a comprehensive quantitative analysis of the candidates who participated in the 2019 Lok Sabha Elections in India. Our primary goal is to leverage the power of data visualization with Tableau to offer valuable insights into the electoral landscape, candidate demographics, performance factors, and party affiliations.

Understanding Candidate Demographics:

- Through interactive visualizations in Tableau, we aim to provide a detailed insight into the demographic characteristics of the candidates, including their age, gender, educational backgrounds, and professional diversity.
- Understanding the diversity and composition of the candidate pool is vital for evaluating the representation of various segments of society in the Indian political landscape.

Analyzing Candidate Performance:

- We seek to analyze the performance of candidates across different constituencies. Factors such as incumbency, party affiliation, and demographic attributes will be explored to understand what contributed to electoral success.
- This analysis can offer insights into the strategies and dynamics at play during the 2019 Lok Sabha elections.

Exploring Party Affiliations:

- Our project aims to uncover any notable trends or patterns in the party affiliations of the candidates.
- By visualizing the distribution and dominance of different political parties, we provide an opportunity to understand the political affiliations that shaped the electoral landscape in 2019.

- **PROBLEMS DEFINITION & DESIGN THINKING:**

EMPATHY MAP:

- **1. Identify Key User Segments:**
- Begin by identifying the key user segments or personas who will interact with your Tableau project. These could be researchers, policymakers, political analysts, or the general public.

- **2. Gather User Insights:**

- Engage with your user segments to collect insights about their needs, expectations, and pain points when using your Tableau project. This can be done through surveys, interviews, or feedback forms.

Empathy Map:

- An empathy map is typically used to understand the thoughts, feelings, and experiences of a target audience. In your case, you may want to create an empathy map to understand the voters or candidates.

- Gather qualitative data through surveys, interviews, or social media sentiment analysis to capture the emotions, concerns, and motivations of voters or candidates.
- Use this data to create a visual empathy map, which could be a Tableau dashboard. You might create segments based on different types of voters or candidates and display their characteristics, needs, and emotions.

- **BRAINSTORMING MAP:**
- **Identify Key Variables:**

- List the key variables and data points you have or need for your analysis. These might include candidate information, election results, demographics, and more.

- **Brainstorm Questions:**

- Create a Tableau worksheet with a list of questions related to your project. For example:
- What were the key demographics of the candidates?
- How did candidate education influence their performance?
- What were the regional variations in election results?
- Were there any trends in campaign spending?

- **Brainstorming Session:**

- Invite your team or collaborators to a brainstorming session. Share the visual overview and the list of questions you generated.

- **Capture Ideas in Tableau:**

- As ideas and insights come up during the brainstorming session, capture them directly within Tableau. You can add annotations, comments, or even create new worksheets or dashboards to explore specific ideas in more detail.

- **RESULT:**

STORY:

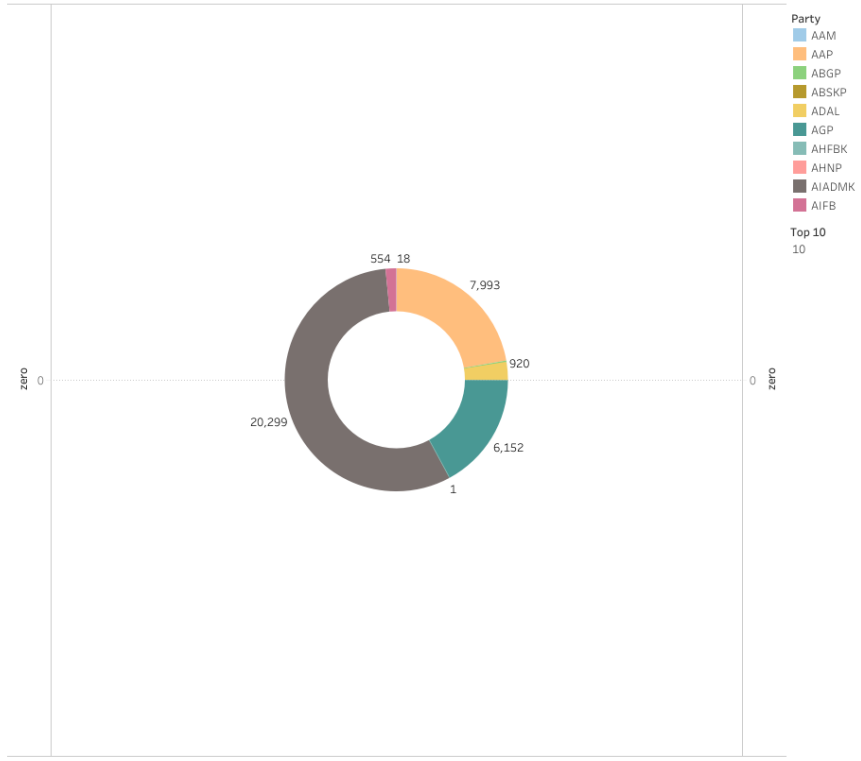
Story 1

Total Winners	Total Criminal Cases	Total Votes in LG	General Votes divided by their Educational ..	Total Electors & Total Winners in each Cons..	Total Postal Votes in Each Party	Top 10 Winners Sta..

Total Criminal cases
2,018

Story 1

Total Votes in LG | General Votes divided by their Educational .. | Total Electors & Total Winners in each Cons.. | **Total Postal Votes in Each Party** | Top 10 Winners States | Total Postal Votes & General Votes By Sta.. | Criminal Cases By State Wise



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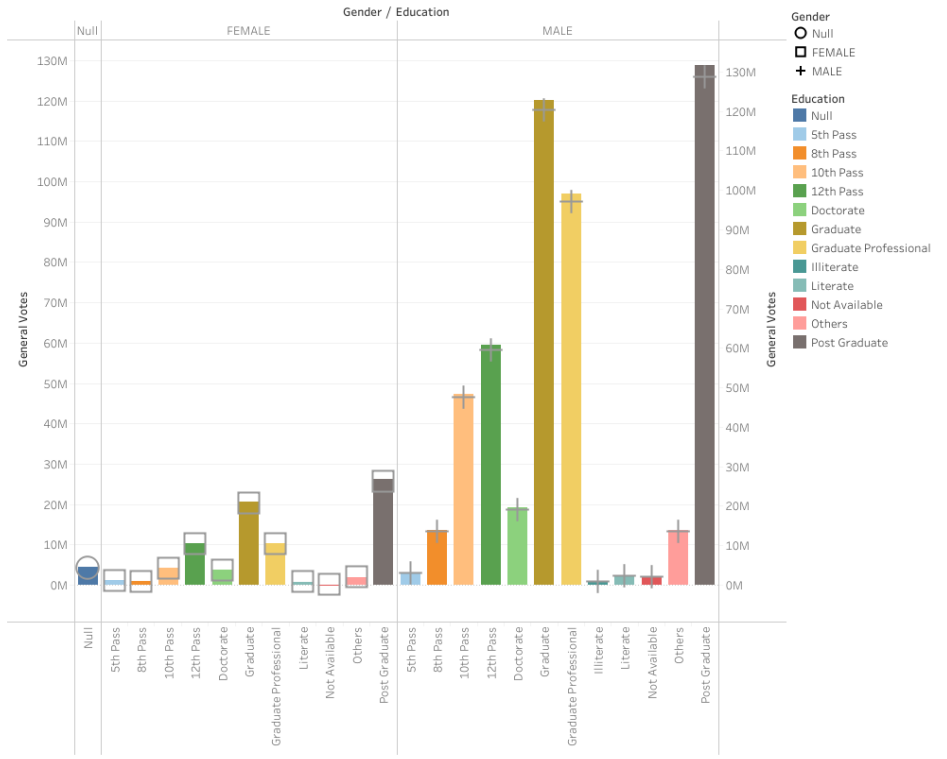
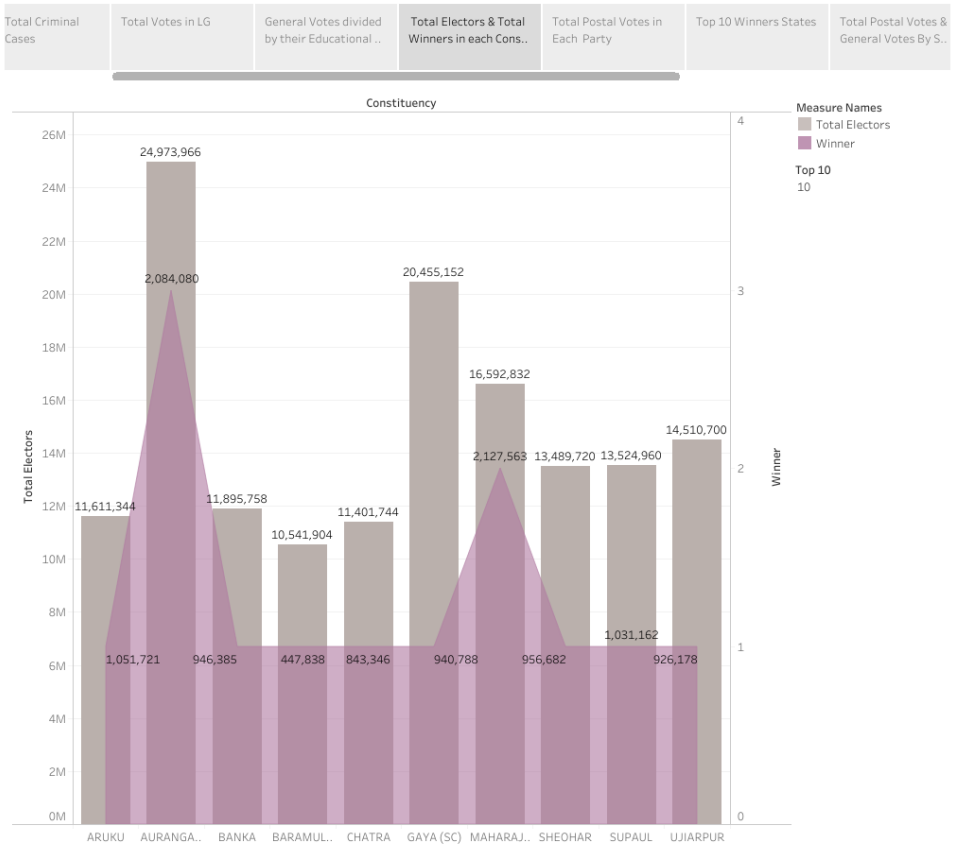
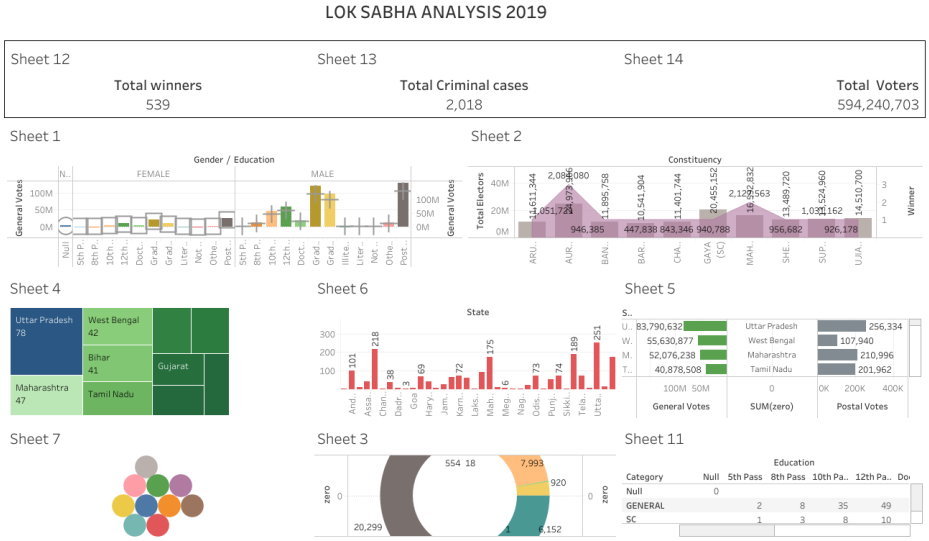


Story 1



- **DASHBOARD:**



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Here are some advantages of such a project:

- **Data Visualization**: Tableau is a powerful tool for visualizing complex data. You can create interactive dashboards, charts, and maps to present your findings in an easy-to-understand manner.

- **Accessibility:** Tableau allows you to share your analysis with a wide audience, including non-technical stakeholders. They can interact with the data and gain insights without needing in-depth knowledge of data analysis.

- **Data Exploration**: You can use Tableau to explore the data, identify trends, and gain a deeper understanding of the candidates, their demographics, and their performance in the elections.

- **Geospatial Analysis**: If you have location-based data (constituencies, candidate home regions, etc.), Tableau's geospatial capabilities can help you analyze the data on a map, revealing geographic trends and patterns.

- **Time-Series Analysis**: You can track changes in candidate performance over time, including pre-election and post-election data, to understand the dynamics of the political landscape.

- **Predictive Analytics**: You can use historical data to build predictive models and gain insights into factors that may influence the outcome of future elections.

- **Comparative Analysis**: Tableau enables you to compare candidates, constituencies, and parties, allowing you to identify significant variations and correlations in the data.

Here are some potential disadvantages to be aware of:

- **Learning Curve**: Tableau can be complex, especially for beginners. Learning to use it effectively might take some time. If you're not already proficient in Tableau, you may need to invest a significant amount of time to learn the tool.

- **Cost**: Tableau is not a free tool. It offers both free and paid versions, but the advanced features often require a paid license. This can be a disadvantage if you're working with a limited budget.

- **Data Preparation**: Preparing data for Tableau can be time-consuming, especially if your data is messy or unstructured. You might need to spend a lot of time cleaning and structuring your data before it can be effectively used in Tableau.

- **Performance**: Large datasets can sometimes slow down Tableau. You might need a powerful computer to work with big datasets, and the visualizations themselves can also be slow to load and interact with in some cases.

- **Limited Customization**: While Tableau is a robust tool, there may be instances where you want to customize your visualizations beyond what Tableau allows. This can be a limitation in cases where highly specialized or unique visualizations are needed.

- **Dependency on Software**: Using Tableau means that your project is tied to this specific software. If you need to collaborate with others who are not familiar with Tableau or prefer other tools, it can be a disadvantage.

- **Licensing and Distribution**: Sharing your Tableau visualizations can be complex, especially if you're using the paid version. You may need to ensure that everyone who needs access has the right licenses, which can be cumbersome and costly.

- **Scalability**: As your project grows, you may encounter issues with scalability. Large-scale data analysis and visualization might require a more robust solution.

To mitigate these disadvantages

- **Data Preparation**: Spend time cleaning and structuring your data before bringing it into Tableau to improve performance and reduce complexity.

- **Cost Management**: Be aware of the cost and licensing requirements. Explore alternatives if Tableau proves to be too expensive for your project.

- **Performance Optimization**: Optimize your visualizations for performance. This might include aggregating data before visualizing it or using Tableau's data source optimization features.

- **Consider Open-Source Alternatives**: There are open-source data visualization tools like D3.js and R Shiny that offer customization and flexibility. These might be worth considering if Tableau's limitations become significant.

- **Collaboration**: If collaboration is a concern, make sure your team is well-trained in Tableau, or consider exporting visualizations to formats that are more widely accessible.

- **Scalability Planning**: As your project scales, consider whether Tableau remains the best tool for the job or if a more specialized solution is required.

Applications:

- **Step 1: Data Collection** Start by collecting the data you need for your analysis. You'll want data on candidates, constituencies, election results, demographics, and any other relevant information. You can obtain this data from government websites, election commissions, or other reliable sources.

- **Step 2: Data Preparation** Clean and structure your data to make it suitable for analysis in Tableau. Ensure that the data is in a tabular format with columns for candidate names, constituencies, party affiliations, vote counts, demographic information, and any other relevant variables.

- **Step 3: Data Import** Open Tableau and connect to your prepared dataset. Tableau supports various data sources, including Excel, CSV, databases, and more. Import your data into Tableau, and ensure that it is organized correctly.

- **Step 4: Data Visualization** Create visualizations to represent the quantitative analysis of candidates in the 2019 Lok Sabha elections. **Here are some ideas for visualizations you can create:**
- **Bar Charts:** Show the number of candidates per political party.
- **Map:** Display the election results by constituency on a map of India.
- **Histograms:** Analyze the age distribution of candidates.
- **Scatter Plots:** Explore relationships between factors like education, wealth, and vote share.
- **Stacked Bar Charts:** Compare vote share for each party by constituency.

- **Step 5: Dashboard Creation** Combine your visualizations into a Tableau dashboard. A dashboard provides an interactive and user-friendly way to explore your data. You can add filters, drop-down menus, and other interactive elements to allow users to customize their analysis.

- **Step 6: Calculations** Use Tableau's calculated fields to perform quantitative calculations on your data. For example, you can calculate the vote share percentage for each candidate, create custom fields for comparisons, or analyze the performance of independent candidates.

- **Step 7: Storytelling** Create a story within Tableau to present your findings effectively. Use annotations, captions, and descriptions to guide users through your analysis, explaining the significance of your visualizations.

- **Step 8: Sharing and Deployment** Publish your Tableau project online or share it with relevant stakeholders. Tableau provides options to publish to Tableau Server or Tableau Public, depending on your needs and privacy considerations.

- **Step 9: User Training** If your Tableau project is intended for a broader audience, provide user training or documentation to help them make the most of the interactive features and understand the insights your analysis provides.

- **Step 10: Iteration** Feedback and continuous improvement are essential. Listen to feedback from users and update your Tableau project as needed to enhance its usefulness and relevance.

- **Conclusion**

- In this project, we conducted a comprehensive quantitative analysis of the candidates who participated in the 2019 Lok Sabha elections in India. Through the power of Tableau visualizations, we explored various facets of this electoral process and gained valuable insights into the political landscape during this critical period.

- **Party Distribution**: Our analysis revealed the distribution of candidates across different political parties. It is evident that a variety of parties contested the elections, with a significant number of independent candidates as well. The dominance of certain political juggernauts was apparent, but the diversity of participants reflects the democratic nature of the elections.

- **Geographical Perspective**: We presented the election results geographically, displaying the performance of different parties in various constituencies across India. This view showcased the varying degrees of political influence and the dynamics of regional and national parties

- **Demographic Insights**: By analyzing candidate demographics, such as age and education, we observed patterns and trends. This allowed us to understand the diversity of candidates and the role of education and age in political representation.

- **Vote Share and Performance**: We calculated and visualized the vote share of different parties, highlighting the performance of candidates in terms of the percentage of votes received. This insight is crucial in assessing the impact and popularity of individual candidates and parties.

- In summary, our quantitative analysis using Tableau has provided a comprehensive view of the 2019 Lok Sabha elections. The results reflect the complexity of Indian politics, with the coexistence of established political parties and the active participation of independent candidates. The geographic distribution of results underlines the regional dynamics that play a crucial role in Indian elections.

- This project not only offers a snapshot of the 2019 Lok Sabha elections but also demonstrates the power of data visualization and analysis in gaining deeper insights into political events. As India's political landscape continues to evolve, this analysis serves as a valuable reference point for understanding the dynamics of democratic representation.

- We hope that this project sparks further research, discussions, and insights into the ever-evolving Indian political landscape. The combination of data, analysis, and visualization in Tableau makes it a powerful tool for researchers, policymakers, and the general public to engage with and understand the intricacies of the electoral process.

- Thank you for exploring "Political Juggernauts: A Quantitative Analysis of Candidates in the 2019 Lok Sabha Elections".

FUTURE SCOPE:

- **1. Ongoing Data Collection and Integration:**

- Establish a mechanism for regularly collecting and updating data related to prominent political figures, parties, or movements. You may need to track their electoral performance, policy decisions, and public sentiment over time.

- Integrate data from various sources, including government records, election results, social media, news articles, and public sentiment analysis tools.

- **2. Enhanced Visualization:**

- Create compelling visualizations that showcase the rise, fall, and influence of political juggernauts. Consider using heatmaps, network diagrams, or Sankey diagrams to represent their connections and impact.
- Develop interactive dashboards that allow users to explore historical and real-time data related to political juggernauts.

- **3. Sentiment Analysis and Public Opinion:**

- Incorporate sentiment analysis tools to gauge public sentiment towards political juggernauts. This can help in understanding the reasons behind their popularity or decline.
- Visualize sentiment trends and correlate them with specific political events or policy decisions.

4. Geospatial Analysis:

- Utilize geospatial analysis to show the geographical distribution of political influence. Create maps that illustrate where political juggernauts have the most significant support or opposition.
- Explore data at different administrative levels, such as state or district, to reveal regional variations.

- **5. Comparative Analysis:**

- Develop features that allow users to compare the influence of different political juggernauts or analyze their performance against specific metrics.
- Use benchmarking to evaluate how political juggernauts stack up against historical figures or their peers.

- **6. Scenario Planning:**

- Enable users to create and analyze different political scenarios. For example, allow them to simulate the impact of a particular political figure joining a new party or the consequences of specific policy decisions

- **7. Machine Learning and Predictive Analysis:**
- Implement machine learning models to predict future political trends. For instance, you could forecast election results, the longevity of a political movement, or shifts in public sentiment.

- **8. Integration of Real-time Data:**

- Incorporate real-time data feeds to provide up-to-the-minute information on political events, social media trends, and public sentiment.

- **9. Mobile Accessibility:**

- Ensure that your Tableau project is mobile-responsive, making it accessible to a broader audience, including policymakers, political analysts, and the general public.

- **10. Collaboration and Feedback:**

- Encourage collaboration by allowing users to contribute information, share insights, and comment on your visualizations.

- **11. Data Privacy and Security:**

- Ensure that you maintain high standards of data privacy and security, especially when dealing with sensitive political data.

- **12. Documentation and Transparency:**

- Thoroughly document your data sources, methodology, and assumptions. Transparency in data analysis and visualization is essential.
- **13. User Training and Support:**

- Provide training materials and support to users who may not be familiar with Tableau to ensure they can make the most of your project.

- **14. Evolving Research Questions:**

- Be prepared to adapt your project to new research questions and evolving political landscapes. Flexibility is crucial to maintaining relevance.

- **15. Engagement with Stakeholders:**

- Actively engage with stakeholders, including researchers, journalists, and policymakers, to understand their needs and incorporate their feedback.
- The future scope of your "Political Juggernauts" Tableau project lies in your ability to stay current, be adaptable, and continually provide valuable insights into the dynamic world of politics. By following these guidelines and keeping an eye on emerging trends, you can ensure that your project remains relevant and influential.

APPENDIX:

GITHUB REPOSITORY LINK: https://github.com/NM2023TMID10857/LOK-SABHA- ELECTION_NM2023TMID10857.git