Infosys Springboard Virtual Internship 6.0
Completion Report

Batch Number - 6

Start date – 25-NOV-2025

Names:

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Internship Duration: 8 Weeks

1. Project Title

ElectViz Election Data Visualization for Media

2. Project Objective

The primary objective of the ElectViz project is to analyze and visualize complex data from Indian General elections using Power BI. The goal is to transform vast and raw election data into a clear, interactive, and easily understandable dashboard.

This tool is designed specifically for media organizations, political analysts, and the public to explore voting patterns, party performance, and historical trends without needing to sift through complex spreadsheets.

The main goals of this project are:

1. To consolidate and analyze key election metrics, including total votes, party participation, seats won, and voter turnout.
2. To identify historical voting trends by visualizing data across different election years.
3. To provide a comparative analysis of political party performance at both the state and national levels.
4. To create a detailed breakdown of seat distribution by state and constituency type.
5. To utilize Power BI's interactive features (slicers, filters, and drill-downs) to empower users to find specific insights dynamically.
6. To provide a data-driven tool for the media to support accurate reporting and insightful political commentary.

3. Project description in detail

The ElectViz project was developed as a part of Infosys Springboard Virtual Internship 6.0 to explore how data visualization can enhance political and electoral reporting. Our team used the Indian General Election dataset from Kaggle to create a Power BI dashboard that highlights state and party election results, candidates performances and year and winning analysis..

The dashboard includes Eight main pages: Overview, State analysis, Party Performance, Candidate Performance,Year analysis,Winning analysis,StateWise Map analysis and DemographicTrend and analysis. Each page uses interactive filters, KPIs, and charts to summarize large-scale election results for easy interpretation by journalists and citizens

Overview and Purpose

In the fast-paced media landscape, especially during election cycles, there is a critical need for quick, accurate, and compelling data insights. Indian elections are famously large and complex, involving thousands of parties and billions of votes across decades.

The ElectViz project addresses this need by creating a single, unified Power BI dashboard. It provides a comprehensive overview of Indian General election history, filtered by year, state, party, and candidates. The dashboard allows media users to instantly identify key statistics, spot trends, and compare party performance, enabling them to craft data-driven stories and reports.

Dataset Description

The dataset used for this project is a comprehensive, granular collection of Indian general election results.The dataset includes the following key fields:

Field Name	Description
State Name	State where the election was held
Constituency	Electoral constituency contested
Candidate Name	Full name of the candidate
Gender	Gender identity of the candidate
Age	Age of the candidate
Category	Reservation category (General/SC/ST/OBC)
Party	Political party name
Party Symbol	Election symbol of the party

Total_Votes_Polled	Total votes cast in the constituency
Votes_Secured	Votes gained by the candidate
Pct_of_Polled	% of total polled votes received
Pct_of_Valid	% of valid votes received
Votes_Secured_fill	Cleaned/replacement vote count field
Winner_Name	Candidate with maximum votes in constituency
Winner_Party	Party of the winning candidate
Winner_Votes	Votes received by winner
RunnerUp_Votes	Votes received by runner-up
Winning_Margin	Difference between winner and runner-up votes
Is_Winner	Indicates if candidate won (True/False)
YEAR	Year of election

Tools and Technologies Used

1. **Microsoft Power BI Desktop**:
   Used as the primary platform for importing the dataset, building data models, performing analysis, and creating interactive dashboards that highlight election trends, candidate performance, and winning margins.

2. **Power Query Editor (in Power BI):**
   Utilized for data preprocessing tasks such as removing inconsistencies, handling missing vote values (*Votes_Secured_fill*), standardizing fields (e.g., Party & Party Symbol), and preparing the data for visualization.

3. **DAX (Data Analysis Expressions):**
   Applied to develop analytical measures and KPIs including Total Votes Polled, Winning Margin, Percent of Votes Secured, and Candidate Win Identification (*Is_Winner*), allowing real-time calculations and responsive visuals.

4. **Microsoft Excel:**
   Used as a supplementary tool for initial dataset exploration, column verification, and

validation of statistical metrics before importing into Power BI.

5. **Canva & PowerPoint:**
   Employed to design presentation templates, dashboard mockups, report visuals, and final project slides for professional presentation and documentation.

4. Timeline Overview

Week	Activities Planned	Activities Completed
Week 1	• Orientation on project goals, dataset introduction, and Power BI basics. • Understanding the provided election dataset fields and scope planning.	• Project workspace setup completed. • Dataset structure analyzed (10,000 rows and 20 columns). • Project scope finalized for 8 dashboards based on media-focused reporting.
Week 2	• Dataset preprocessing in Power Query (handling missing values, data type corrections). • Cleaning fields like *Votes_Secured_fill*, *Gender*, and *Party Symbol*.	• Cleaned dataset imported into Power BI .• Null values filled where required; formats standardized. • Invalid entries removed and column validation completed.
Week 3	• Data modeling and relationship building between main data fields. • Preparation for DAX-based measures (KPIs).	• Data model established for responsive filtering. • Preliminary slicers tested (Year, Party, State, Category).
Week 4	• Develop core DAX measures: Total Votes Polled, Percentage Votes Secured, Winning Margin, Candidate Win Flag (*Is_Winner*), etc.	• Key KPIs implemented and validated across dimensions. • Dashboard navigation structure & theme finalized.
Week 5	• Build the first four dashboards: 1 Overview 2 State Analysis 3 Party Performance 4	• Visuals added: KPI cards, Bar Charts, Line Charts, Donut Charts. • Filters and slicers made interactive across pages.

	Candidate Performance	
Week 6	• Build next four dashboards: 5 Year Analysis 6 Winning Analysis 7 State-wise Map Analysis 8 Demographic Trends & Analysis	• Map visuals plotted using State-wise data . • Winning margin patterns & demographic filters applied. • All pages aligned with a unified design template.
Week 7	• Testing for accuracy and dashboard responsiveness. • Mentor/team review for performance and user experience.	• Debugging completed • Optimized navigation, slicers, and tooltip explanations. • Final user-ready interface prepared.
Week 8	• Final preparation & documentation of the project. • Presentation slide and report drafting.	• Final Power BI presentation delivered. • Internship completion report prepared and submitted with dashboard screenshots.

5a. Key Milestones

Milestone	Description	Date Achieved
Project Kickoff	The project officially began with understanding the objective: analyzing synthetic election data and building **8 dashboards** for media reporting. Problem statement finalized and dataset structure (10,000 rows, 20 columns) reviewed.	**25th November, 2025**
Prototype / First Draft	Initial data cleaning completed in Power Query. Data types verified, missing values handled (*Votes_Secured_fill*). Core KPIs identified (Total Votes, Win Flag, Winning Margin). First draft of **Overview Dashboard** created.	**2nd December, 2025**

Mid-Term Review	All **8 dashboards** completed in draft form: Overview, State Analysis, Party Performance, Candidate Performance, Year Analysis, Winning Analysis, State-wise Map, and Demographic Trends. Feedback taken to improve slicers, layout, and KPI clarity.	**15th December, 2025**
Final Submission	Final .PBIX file optimized, DAX measures validated, slicers synced, visuals standardized. Full navigation and tooltip design completed. Documentation work started for the final report.	**22nd December, 2025**
Presentation	Final dashboard presented to mentor/team. Demonstrated KPI cards, map visual, demographic insights, and real-time filter analysis. Highlighted media-use cases like election storytelling & strategic reporting.	**24th December, 2025**

5b. Project Execution Details

The project was executed over an eight-week timeline, moving from requirement analysis to data preparation, visualization, testing, and final documentation. The primary objective was to convert the synthetic election dataset (10,000 records, 20 fields) into an interactive analytical Power BI solution that supports media reporting, political insights, and trend interpretation.

1. Requirement Understanding and Planning

The project began with understanding the target audience — mainly media teams, journalists, researchers, and political analysts. Key questions to answer through dashboards included:

- **Who won?**
- **Where did they win?**

- **By how much was the margin?**
- **What patterns or trends exist across states, parties, demographics, and years?**

Based on these requirements, **eight dashboards** were planned.
Roles were assigned for:

- Data cleaning (Power Query)
- KPI creation (DAX)
- Visualization & layout formatting
- Reporting & documentation

2. Data Collection and Preparation

The dataset consisted of fields like: *State Name, Constituency, Party, Votes_Secured, Winner_Party, Winning_Margin, Gender, Age, YEAR,* and *Is_Winner*.

Data preparation steps:

- **Data Cleaning:**
  Standardized fields like *Party Symbol, Category, Gender*. Missing values in **Votes_Secured_fill** were handled. Ensured consistency in numeric fields such as **Winning_Margin** and **Pct_of_Polled**.
- **Transformation:**
  - Converted numeric columns to number format
  - Validated categorical fields (e.g., Gender & Category)
  - Added calculated fields for analysis using DAX
- **Modeling:**
  Imported cleaned data to Power BI and established a structured model to support slicers like **State, Party, YEAR, Category, Gender**, enabling cross-page interaction.

3. Dashboard Development in Power BI

The analysis was presented across **eight dashboards**, each serving a focused purpose with a unified layout and theme:

Dashboard Name	Purpose / Key Insights

1️⃣ **Overview Dashboard**	Provides high-level KPIs such as Total Votes Polled, Total Candidates, Party Presence Count, and Election Year Range.
2️⃣ **State Analysis Dashboard**	State-wise comparison of votes, winners, and margin heatmaps; identifies strongholds and competitive regions.
3️⃣ **Party Performance Dashboard**	Tracks party strength using metrics like number of wins, vote share percentage, and strongest constituencies.
4️⃣ **Candidate Performance Dashboard**	Compares candidates based on vote percentage, total votes secured, win/loss status, and margin.
5️⃣ **Year Analysis Dashboard**	Trend visuals showing changes in voting patterns, winning margins, and party dominance year-by-year.
6️⃣ **Winning Analysis Dashboard**	Focuses on outcomes: winners, runner-up values, and victory margin distribution.
7️⃣ **State-wise Map Analysis**	Uses map visuals to geographically display election results and regional impact.
8️⃣ **Demographic Trends & Analysis**	Tracks insights by **Age, Gender, and Category** to study participation and representation patterns.

Core visuals include:

- Bar charts | Line graphs | Donut charts
- Filled map visuals | KPI cards | Matrix tables
- Drill-down enabled views for deeper filtering

4. Interactivity and Advanced Analytics

To enhance user-driven analysis:

- **Slicers were synced across all dashboards**
- **Tooltips** were configured for contextual information
- **Bookmarks & navigation buttons** created structured movement between pages
- **DAX Measures** were used for:
    - `Winning_Margin`
    - `Votes_Secured %`
    - `Is_Winner Flag`
    - `Top Party & Top State Insights`
    - `Demographic Participation Ratios`

This made the report **fully dynamic**, updating all insights instantly based on any filter selected.

5. Testing, Review, and Final Delivery

The final stage included:

- **Validation** of KPI values against dataset totals
- **Dashboard performance optimization**
- **Visual consistency check** (color theme, label clarity, slicer alignment)
- Incorporating feedback for improving readability & storytelling

The final `.pbix` file was delivered along with documentation and project presentation slides summarizing analytical findings.

6. Interactivity and Analytics

The strength of the project lies in its interactive analytical capabilities within Power BI.

Interactive Features Implemented

- **DAX Measures:**
  All core KPIs such as **Total Votes Polled, Winning Margin, % Vote Secured, Top Party, Top State, and Demographic Ratios** were created using DAX.
  These update dynamically based on any slicer/filter selection.

- **Slicers and Filters:**
  Slicers were added for:
  - **YEAR**
  - **State Name**
  - **Party**
  - **Category**
  - **Gender**
  - **Is_Winner (Win / Loss status)**

- These slicers are synced across all **8 dashboards**, enabling instant data context change.
  For example, selecting **"2024" & "Maharashtra"** automatically updates all visuals across the report to show results only for that filtered data.

- **User-driven Exploration:**
  - Drill-down and drill-through enabled for hierarchical analysis
  - Tooltip summaries with margin, party, and demographic details
  - Bookmark navigation buttons for smooth dashboard switching

7. Testing and Validation

Before final delivery, multiple testing steps were performed to ensure accuracy and performance.

Testing Performed

- **Data Validation:**
  KPIs like **Winning Votes, RunnerUp Votes, Total Polled Votes** were verified by cross-checking with raw dataset values.
  For example, winning margins visible on the **Winning Analysis Dashboard** were

validated by recalculation:
Winning_Margin = Winner_Votes – RunnerUp_Votes.

- **Functional Testing:**
    - All slicers tested for correct filtering behavior
    - Visual interactions like highlighting, drill-down, and map selections validated
    - Checked that no visuals break when filters return small results
- **Visual Optimization:**
    - Color theme standardized for uniformity
    - Font sizes aligned for readability
    - Card KPIs positioned consistently for structured navigation

8. Review, Refinement, and Final Presentation

After completing all dashboards, the project was reviewed from a storytelling and user experience perspective.

Refinements Done

- Enhanced **tooltips** with added metrics like age, category, and margin context
- Unified **header layout and navigation** across all 8 pages
- Adjusted visual spacing to reduce clutter and improve readability
- Improved map visualization to reflect clear state-level distinctions

Final Presentation

A walkthrough presentation was conducted demonstrating:

- Navigation flow between dashboards
- State-wise and year-wise trends
- Insights from demographic participation and party outcomes
- Real-time scenario demo using slicers

9. Outcome of Project Execution

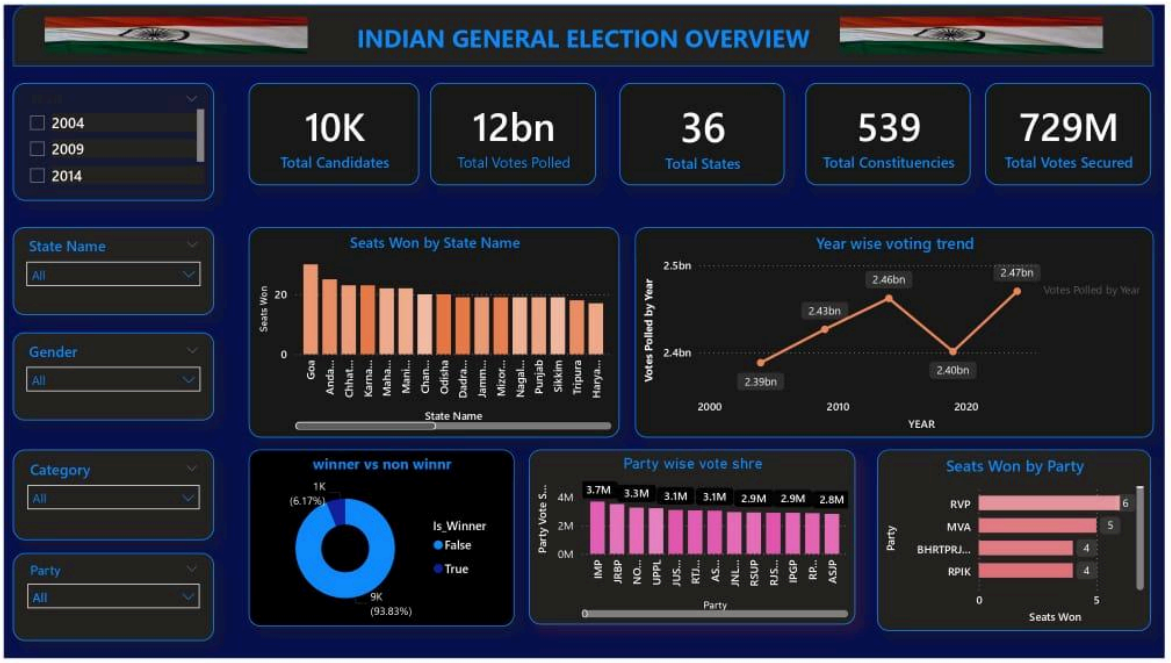
The project resulted in a comprehensive **8-page interactive Power BI dashboard**.
It enables election analysis through multiple lenses including **location, time, party, candidate, margin, and demographics**.

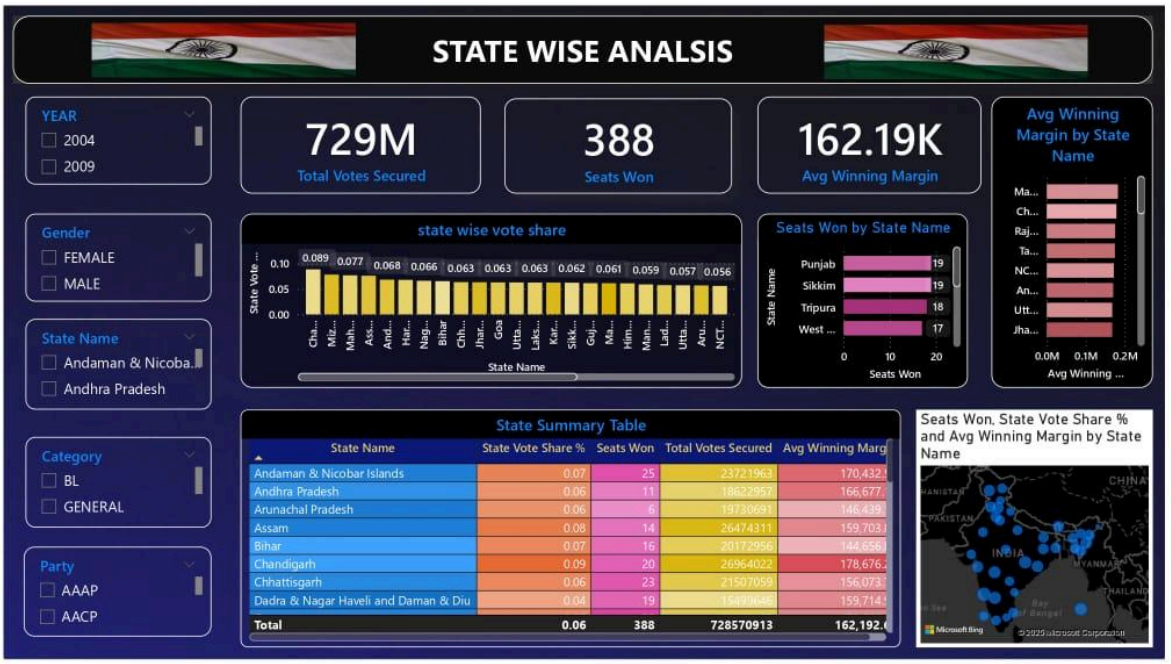
Final Output Summary

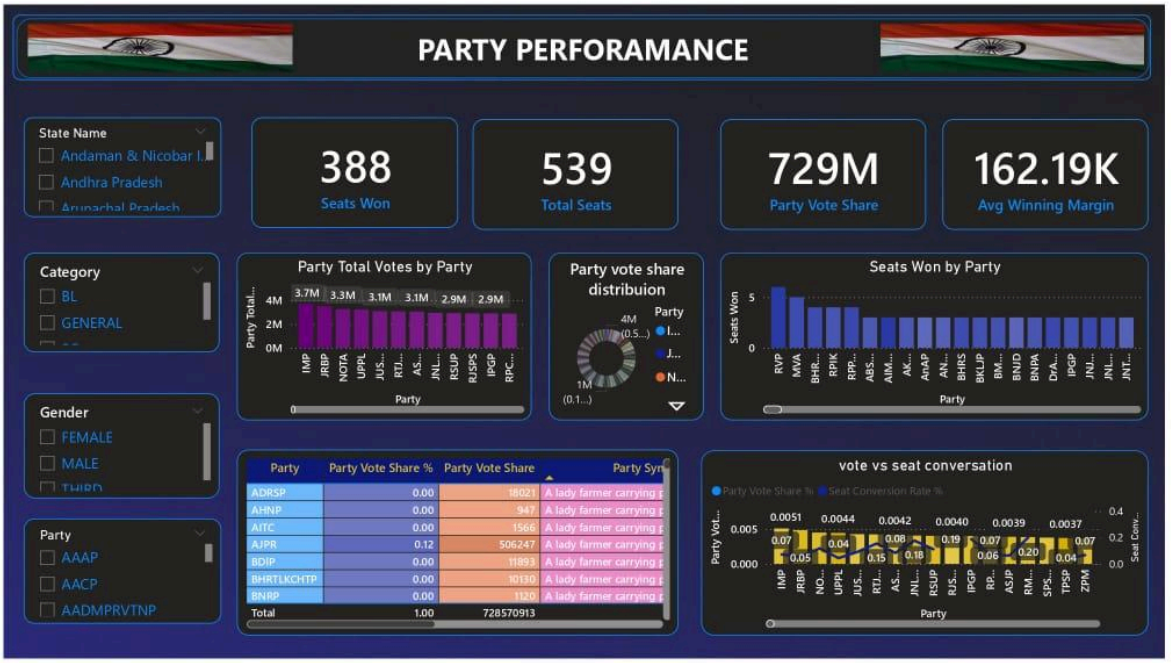
Area	Key Result
Dataset Volume	10,000 records, 20+ fields
Dashboards Built	8 interactive dashboards
Insights Provided	Party strength, state trends, demographic impact
Target Users	Media analysts, researchers, political observers
Core Benefit	Quick, interactive, data-driven election storytelling

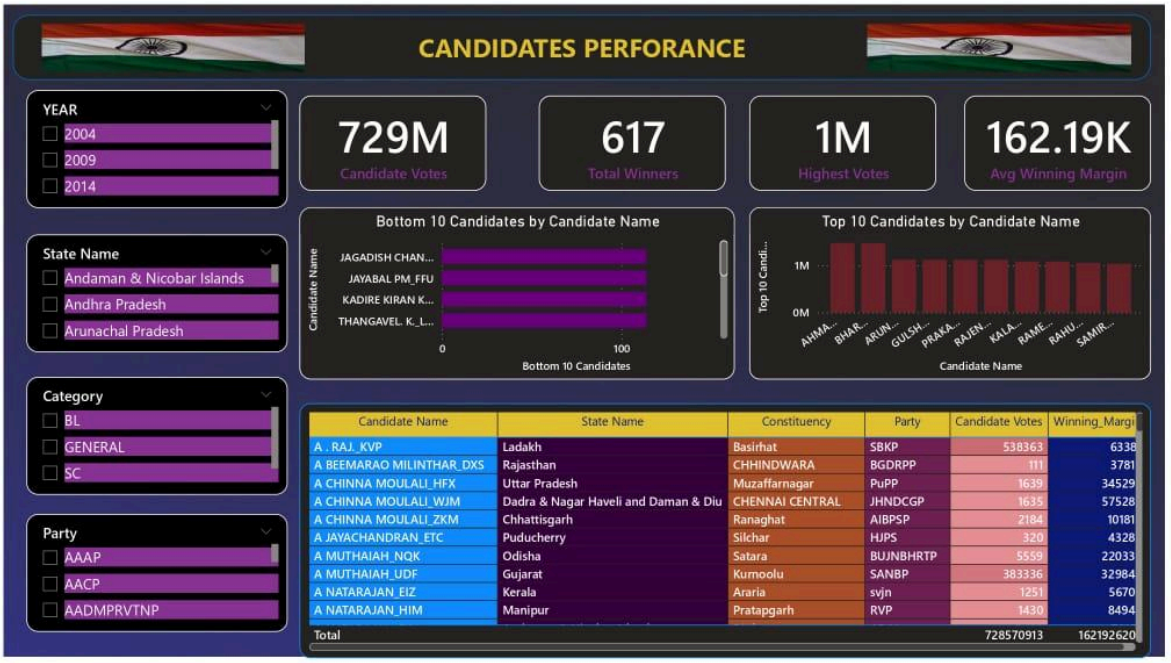
The final solution transforms raw election data into an accessible, visual intelligence system that supports media reporting and decision-making.

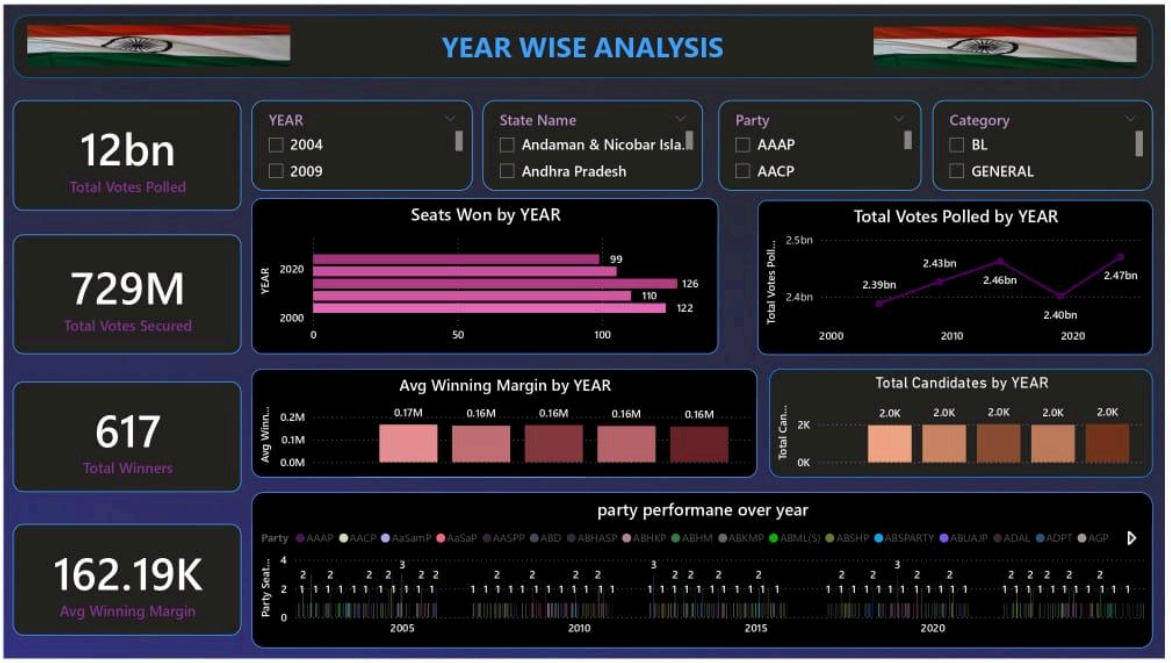
10. Snapshots / Screenshots

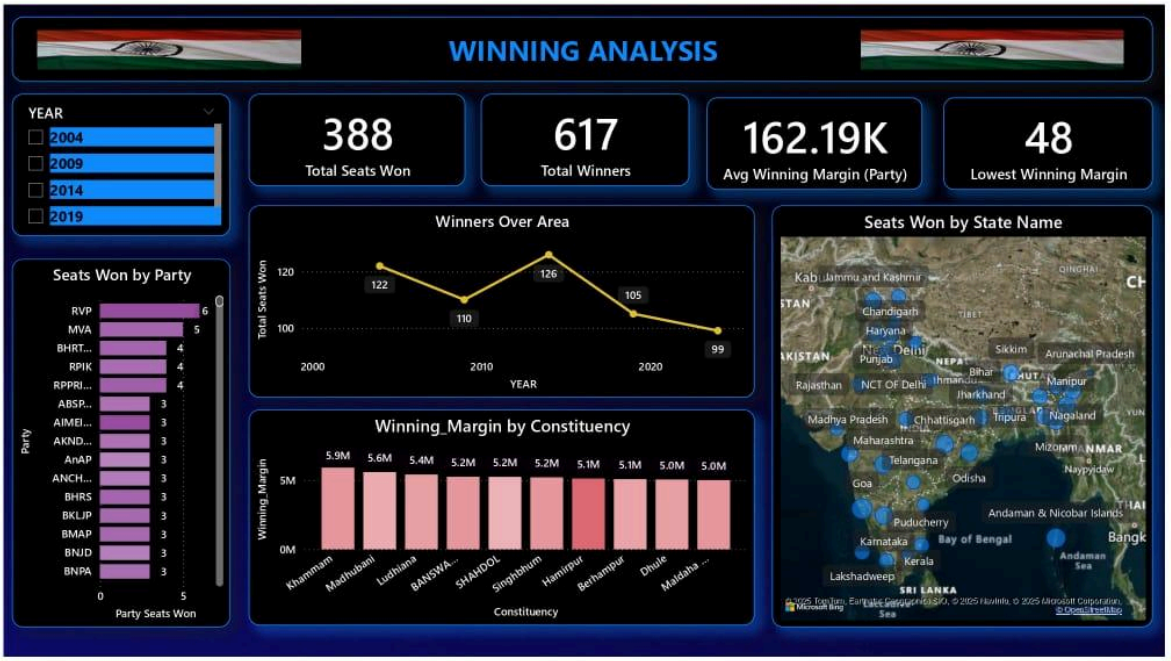

INDIAN GENERAL ELECTION OVERVIEW
2004
2009
2014
10K
Total Candidates
12bn
Total Votes Polled
36
Total States
539
Total Constituencies
729M
Total Votes Secured
State Name
All
Gender
All
Category
All
Party
All
Seats Won by State Name
Seats Won
State Name
Year wise voting trend
Votes Polled by Year
YEAR
2.39bn
2.43bn
2.46bn
2.40bn
2.47bn
winner vs non winnr
1K (6.17%)
9K (93.83%)
Is_Winner
False
True
Party wise vote shre
3.7M
3.3M
3.1M
3.1M
2.9M
2.9M
2.8M
Party
Seats Won by Party
RVP
MVA
BHRTPRJ...
RPIK
Seats Won

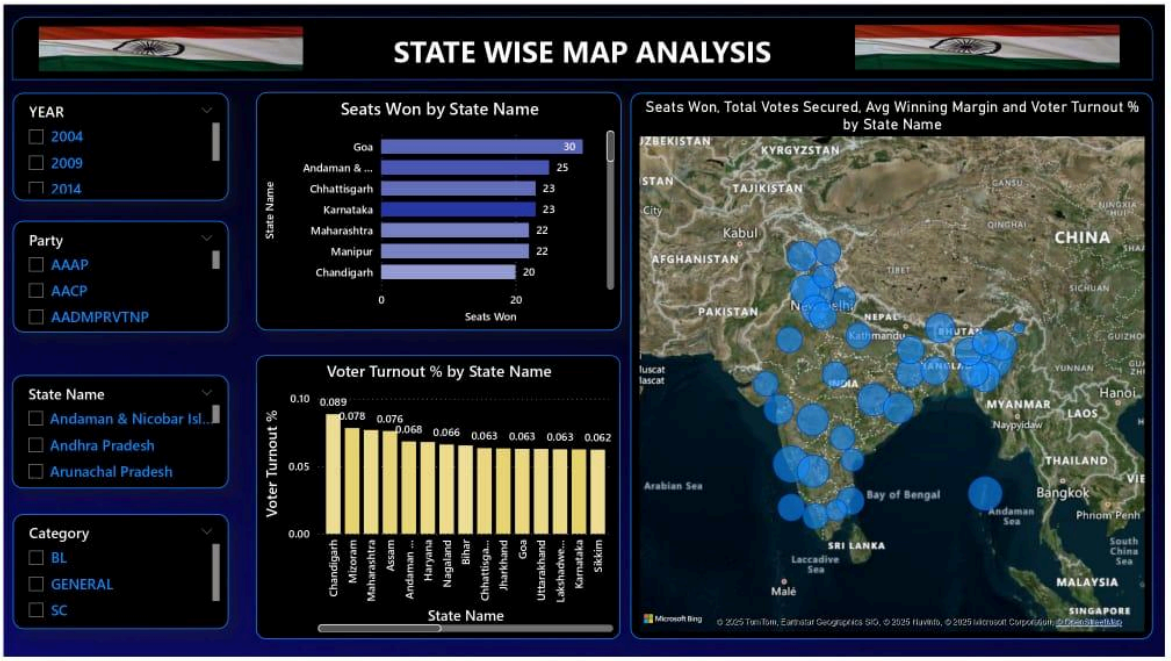

STATE WISE ANALSIS
YEAR
2004
2009
729M
Total Votes Secured
388
Seats Won
162.19K
Avg Winning Margin
Avg Winning Margin by State Name
Gender
FEMALE
MALE
State Name
Andaman & Nicoba...
Andhra Pradesh
state wise vote share
0.089
0.077
0.068
0.066
0.063
0.063
0.063
0.062
0.061
0.059
0.057
0.056
State Name
Seats Won by State Name
Punjab
Sikkim
Tripura
West ...
19
19
18
17
Seats Won
Category
BL
GENERAL
Party
AAAP
AACP
State Summary Table
State Name
State Vote Share %
Seats Won
Total Votes Secured
Avg Winning Marg
Andaman & Nicobar Islands
0.07
25
23721963
170,432
Andhra Pradesh
0.06
11
18622957
166,677
Arunachal Pradesh
0.06
6
19730691
146,439
Assam
0.08
14
26474311
159,703
Bihar
0.07
16
20172956
144,656
Chandigarh
0.09
20
26964022
178,676
Chhattisgarh
0.06
23
21507059
156,073
Dadra & Nagar Haveli and Daman & Diu
0.04
19
Total
0.06
388
728570913
162,192
Seats Won, State Vote Share % and Avg Winning Margin by State Name
CHINA
INDIA
MYANMAR
THAILAND

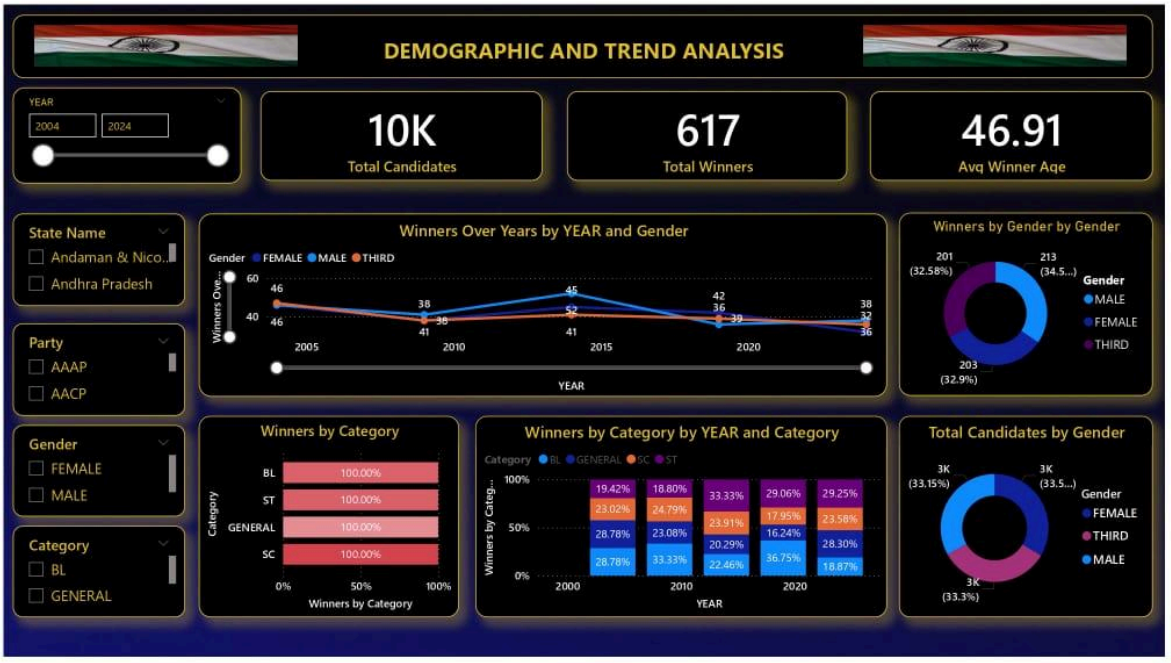

PARTY PERFORAMANCE
State Name
Andaman & Nicobar I...
Andhra Pradesh
388
Seats Won
539
Total Seats
729M
Party Vote Share
162.19K
Avg Winning Margin
Category
BL
GENERAL
Party Total Votes by Party
3.7M 3.3M 3.1M 3.1M 2.9M 2.9M
Party
Party vote share distribuion
Party
Seats Won by Party
Seats Won
Party
Gender
FEMALE
MALE
Party
AAAP
AACP
AADMPRVTNP
Party Party Vote Share % Party Vote Share Party Sym
ADRSP 0.00 18021 A lady farmer carrying
AHNP 0.00 947 A lady farmer carrying
AITC 0.00 1566 A lady farmer carrying
AJPR 0.12 506247 A lady farmer carrying
BDIP 0.00 11893 A lady farmer carrying
BHRTLKCHTP 0.00 10130 A lady farmer carrying
BNRP 0.00 1120 A lady farmer carrying
Total 1.00 728570913
vote vs seat conversation
Party Vote Share %
Seat Conversion Rate %
Party
Party Vot...
Seat Conv...


CANDIDATES PERFORANCE
YEAR
2004
2009
2014
729M
Candidate Votes
617
Total Winners
1M
Highest Votes
162.19K
Avg Winning Margin
Bottom 10 Candidates by Candidate Name
JAGADISH CHAN...
JAYABAL PM_FFU
KADIRE KIRAN K...
THANGAVEL. K._L...
Candidate Name
Bottom 10 Candidates
Top 10 Candidates by Candidate Name
Top 10 Candi...
Candidate Name
State Name
Andaman & Nicobar Islands
Andhra Pradesh
Arunachal Pradesh
Category
BL
GENERAL
SC
Party
AAAP
AACP
AADMPRVTNP
Candidate Name State Name Constituency Party Candidate Votes Winning_Margi
A . RAJ_KVP Ladakh Basirhat SBKP 538363 6338
A BEEMARAO MILINTHAR_DXS Rajasthan CHHINDWARA BGDRPP 111 3781
A CHINNA MOULALI_HFX Uttar Pradesh Muzaffarnagar PuPP 1639 34529
A CHINNA MOULALI_WJM Dadra & Nagar Haveli and Daman & Diu CHENNAI CENTRAL JHNDCGP 1635 57528
A CHINNA MOULALI_ZKM Chhattisgarh Ranaghat AIBPSP 2184 10181
A JAYACHANDRAN_ETC Puducherry Silchar HJPS 320 4328
A MUTHAIAH_NQK Odisha Satara BUJNBHRTP 5559 22033
A MUTHAIAH_UDF Gujarat Kumoolu SANBP 383336 32984
A NATARAJAN_EIZ Kerala Araria svjn 1251 5670
A NATARAJAN_HIM Manipur Pratapgarh RVP 1430 8494
Total 728570913 162192620


YEAR WISE ANALYSIS
12bn
Total Votes Polled
729M
Total Votes Secured
617
Total Winners
162.19K
Avg Winning Margin
YEAR
2004
2009
State Name
Andaman & Nicobar Isla...
Andhra Pradesh
Party
AAAP
AACP
Category
BL
GENERAL
Seats Won by YEAR
2020
2000
99
126
110
122
0
50
100
Total Votes Polled by YEAR
2.5bn
2.4bn
2.39bn
2.43bn
2.46bn
2.40bn
2.47bn
2000
2010
2020
Avg Winning Margin by YEAR
0.2M
0.1M
0.0M
0.17M
0.16M
0.16M
0.16M
0.16M
Total Candidates by YEAR
2K
0K
2.0K
2.0K
2.0K
2.0K
2.0K
party performane over year
2005
2010
2015
2020


WINNING ANALYSIS
YEAR
2004
2009
2014
2019
388
Total Seats Won
617
Total Winners
162.19K
Avg Winning Margin (Party)
48
Lowest Winning Margin
Seats Won by Party
RVP
MVA
BHRT...
RPIK
RPPRI...
ABSP...
AIMEI...
AKND...
AnAP
ANCH...
BHRS
BKLJP
BMAP
BNJD
BNPA
Party Seats Won
Winners Over Area
Total Seats Won
122
110
126
105
99
2000
2010
2020
YEAR
Winning_Margin by Constituency
5.9M
5.6M
5.4M
5.2M
5.2M
5.2M
5.1M
5.1M
5.0M
5.0M
Khammam
Madhubani
Ludhiana
BANSWA...
SHAHDOL
Singhbhum
Hamirpur
Berhampur
Dhule
Malkaha ...
Constituency
Seats Won by State Name
Jammu and Kashmir
Chandigarh
Haryana
Punjab
Delhi
Sikkim
Arunachal Pradesh
Rajasthan
NCT OF Delhi
Bihar
Manipur
Jharkhand
Madhya Pradesh
Chhattisgarh
Tripura
Nagaland
Maharashtra
Mizoram
Telangana
Odisha
Goa
Puducherry
Andaman & Nicobar Islands
Karnataka
Bay of Bengal
Kerala
Andaman Sea
Lakshadweep
SRI LANKA


STATE WISE MAP ANALYSIS
YEAR
2004
2009
2014
Party
AAAP
AACP
AADMPRVTNP
State Name
Andaman & Nicobar Isl...
Andhra Pradesh
Arunachal Pradesh
Category
BL
GENERAL
SC
Seats Won by State Name
Goa 30
Andaman & ... 25
Chhattisgarh 23
Karnataka 23
Maharashtra 22
Manipur 22
Chandigarh 20
State Name
Seats Won
Voter Turnout % by State Name
0.089 0.078 0.076 0.068 0.066 0.063 0.063 0.063 0.062
Chandigarh Mizoram Maharashtra Assam Andaman ... Haryana Nagaland Bihar Chhattisga... Jharkhand Goa Uttarakhand Lakshadwe... Karnataka Sikkim
Voter Turnout %
State Name
Seats Won, Total Votes Secured, Avg Winning Margin and Voter Turnout % by State Name
UZBEKISTAN
KYRGYZSTAN
TAJIKISTAN
Kabul
AFGHANISTAN
PAKISTAN
CHINA
NEPAL
Kathmandu
BHUTAN
MYANMAR
Naypyidaw
LAOS
Hanoi
THAILAND
Bangkok
Phnom Penh
Arabian Sea
Bay of Bengal
Andaman Sea
SRI LANKA
Laccadive Sea
Malé
MALAYSIA
SINGAPORE
South China Sea


DEMOGRAPHIC AND TREND ANALYSIS
YEAR
2004
2024
10K
Total Candidates
617
Total Winners
46.91
Avg Winner Age
State Name
Andaman & Nico...
Andhra Pradesh
Party
AAAP
AACP
Gender
FEMALE
MALE
Category
BL
GENERAL
Winners Over Years by YEAR and Gender
Gender FEMALE MALE THIRD
YEAR
Winners by Gender by Gender
201 (32.58%)
213 (34.5...)
203 (32.9%)
Gender MALE FEMALE THIRD
Winners by Category
BL 100.00%
ST 100.00%
GENERAL 100.00%
SC 100.00%
Winners by Category
Winners by Category by YEAR and Category
Category BL GENERAL SC ST
YEAR
Total Candidates by Gender
3K (33.15%)
3K (33.5...)
3K (33.3%)
Gender FEMALE THIRD MALE

11. Challenges Faced

During the execution of this project, several challenges were encountered across technical, operational, and communication domains. These challenges helped the team learn, adapt, and improve the solution at every stage.

1️⃣ Technical Challenges

- ☐ Data Cleaning & Preparation:

  The dataset included missing values in fields like *Votes_Secured*, non-uniform text formats for *Party* and *Gender*, and numeric fields stored as text.

  Resolution:

  Power Query was used to clean structured fields, handle missing values using *Votes_Secured_fill*, and ensure proper formatting for analysis.

- ☐ DAX Calculations & KPI Logic:

  Creating accurate measures such as Winning Margin, Candidate Win Flag (Is_Winner), Percentage of Polled Votes, and Demographic Ratios required nested DAX logic.

  Resolution:

  Functions like `SUMX`, `DIVIDE`, `CALCULATE`, and conditional logic were used after multiple testing cycles to validate accurate results.

- ☐ Dashboard Interactivity & Performance:

  Filtering across 8 dashboards with slicers for *YEAR, State, Party, Category,* and *Gender* led to performance slowdowns.

  Resolution:

  Optimized data model, minimized unnecessary columns, and converted repeated calculations into reusable measures to improve performance.

2️⃣ Operational Challenges

- ☐ Managing Multiple Dashboards:

  With 8 dashboards being created, ensuring design consistency across all pages was challenging.

  Resolution:

  A master dashboard template was created with a unified theme, KPI layout, and

slicer panel to maintain consistency.

☐ Balancing Internship & Academics:

Completing tasks while managing academic responsibilities required time planning.

Resolution:

The team implemented weekly task tracking and checklist-based progress monitoring.

3️⃣ Communication Challenges

☐ Visualization Style & Interpretation Differences:

Different visual interpretations among team members led to inconsistency in early versions.

Resolution:

Common visualization rules and color-coding standards were agreed upon (Ex: Green for winners, Red for runner-up, Blue for vote comparison).

12. Learnings & Skills Acquired

Technical Skills

- Structured data cleaning & preprocessing using Power Query
- Dashboard development and interactivity in Power BI
- Writing advanced DAX measures for real-time analytical KPIs
- Experience with map visuals, demographic breakdowns & filter synchronization

Analytical Skills

- Interpretation of election patterns like winning margin trends
- Understanding how demographics (Gender, Age, Category) influence outcomes
- Learning to convert raw datasets into interpretable visual stories

Soft Skills

- Collaborative work distribution and ownership
- Task management through weekly goal planning

- Enhanced presentation skills for dashboard walkthrough and result explanation

13. Testimonials from the Team

Sujit Behera

> "This project taught me how to build fully interactive dashboards and optimize slicer-based analysis. Working on Winning Margin logic and DAX-based KPIs improved my confidence in Power BI."

Naga Venkata Vasavi Jayavarapu

> "I enjoyed working on demographic analysis. Understanding how age, category, and gender influence voting insights helped me gain analytical thinking skills."

A Archana

> "Designing the navigation flow and combining advanced visuals like map charts and KPI cards gave me a practical understanding of dashboard storytelling."

Darshan Shinde

> "The biggest learning for me was data cleaning. Converting messy fields into accurate analytical values with Power Query was challenging but rewarding."

Yamini

> "This project improved my understanding of DAX and slicer interactivity. Presenting the final dashboard helped me build confidence in client-facing communication."

14. Conclusion

This internship provided hands-on experience in building a complete data analytics solution. Using a synthetic election dataset of 10,000+ records, we successfully designed 8 dashboards that deliver insights about voting patterns, party performance, state comparisons, year-wise trends, winning margins, and demographic participation.

The project strengthened our technical, analytical, and collaborative skills. It demonstrated how data visualization can transform raw datasets into meaningful insights, supporting real-time decision making for media houses, analysts, and stakeholders.

This internship has inspired our team to pursue data analytics & BI tools with confidence.

15. Acknowledgements

We express our heartfelt gratitude to Infosys Springboard for providing this internship opportunity and structured platform for practical learning.

We extend our sincere appreciation to our mentor for guiding us throughout the project, reviewing dashboards, and providing actionable feedback that helped refine our final output.

We are thankful for the available learning resources, which helped us gain proficiency in Power BI, DAX, and visualization techniques. This experience has become a key milestone in our academic and professional journey.