INTRODUCTION TO DATA MANAGEMENT

PROJECT REPORT

(Project Semester January-April 2025)

LOK SABHA ELECTIONS 2024 DASHBOARD

Submitted by:

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Programme: Bachelor of Technology

Section: K23GN

Course Code: INT217

Under the Guidance of

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Discipline of CSE/IT

Lovely School of Computer Science & Engineering

Lovely Professional University, Phagwara

CERTIFICATE

This is to certify that Samarth Garg, bearing Registration no. 12324193 has completed INT217 project titled, **"**LOK SABHA ELECTIONS 2024 DASHBOARD**"** under my guidance and supervision. To the best of my knowledge, the present work is the result of his original development, effort and study.

Signature and Name of the Supervisor: **Ms. Ashu Mehta**
Designation of the Supervisor:

School of Computer Science & Engineering
Lovely Professional University
Phagwara, Punjab.

Date: 13-04-2025

DECLARATION

I, Samarth Garg, student of Bachelor of Technology under CSE/IT Discipline at, Lovely Professional University, Punjab, hereby declare that all the information furnished in this project report is based on my own intensive work and is genuine.

Date: 13-04-2025

Signature: Samarth garg

Registration No.: 12324193

ACKNOWLEDGEMENT

I express my sincere gratitude to my course instructor, Ms. Ashu Mehta, for their invaluable guidance and support throughout the "Introduction to Data Management" course. Their expertise in data organization and visualization techniques was instrumental in helping me successfully complete this project on creating the LOK SABHA ELECTIONS 2024 DASHBOARD using Excel.

Table of Contents

1. Introduction
2. Source of dataset
3. EDA process
4. Analysis on dataset (for each analysis)
   i. Objective1: KPI Overview
   ii. Objective2: Party-wise Performance
   iii. Objective3: State-wise Analysis
   iv. Objective4: Candidate Leaderboard
   v. Objective5: Voter Turnout Insight
   vi. Objective6: Demographic Analysis
   vii. Objective7: Close Contests
5. Conclusion
6. Future scope
7. References

1. Introduction

1.1 Background

The Lok Sabha Elections 2024 were one of the largest democratic exercises in the world. This dashboard was created to provide a dynamic and interactive view of the results and key metrics using Microsoft Excel. It includes real-time slicers, pivot-based charts, KPIs, and visual summaries to help users easily explore state-wise, party-wise, and candidate-wise data.

1.2 Scope

This project visualizes detailed election metrics such as turnout percentages, candidate demographics, party performance, and margin of victories. It aims to assist users in deriving meaningful political insights using structured data analytics techniques in Excel.

2. Source of Dataset

2.1 Data Description

The dataset consists of detailed candidate-level results from the General Elections 2024. It includes fields like State Name , PC Name , Candidate Name , Gender , Age , Category , Party Name , Party Symbol , Total Votes Polled In The Constituency , Valid Votes , Votes Secured – General , Votes Secured – Postal , Votes Secured - Total , % of Votes Secured - Over Total Electors In Constituency , % of Votes Secured - Over Total Votes Polled In Constituency , Over Total Valid Votes Polled In Constituency , Total Electors.

2.2 Data Collection

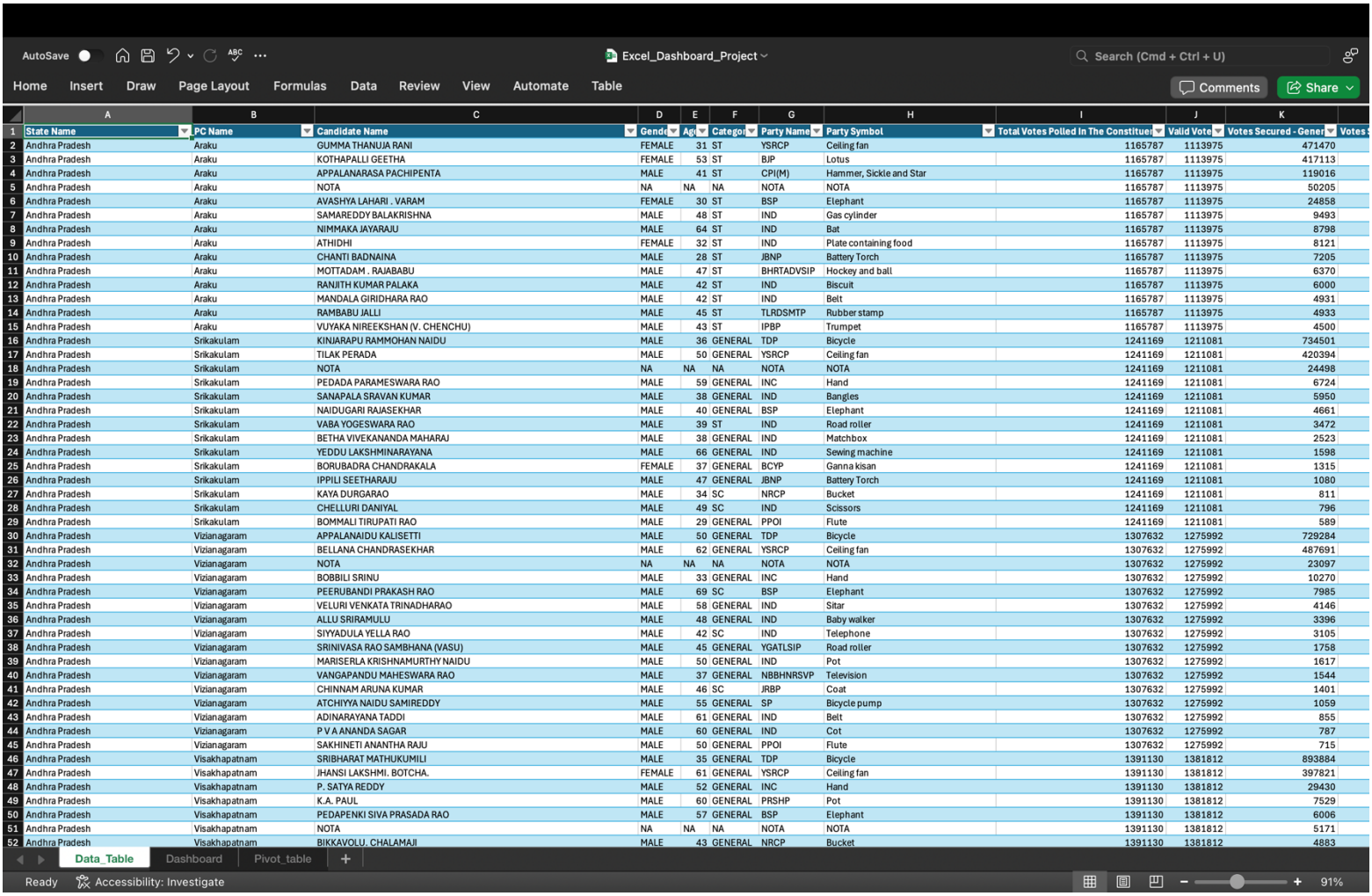
Dataset link: https://www.data.gov.in/resource/constituency-wise-detailed-result-during-2024

3. EDA Process

EDA was done using Excel's PivotTables and formulas. Key operations included:

- Cleaning duplicates and outliers
- Creating helper columns (e.g., Margin, Rank, Win Status)
- Calculating %Turnout and Vote Share
- Using PivotTables to extract insights
- Applying slicers for filters (State, Gender, Category)
- Conditional formatting for visual cues

Visual tools used: Pie Charts, Column & Bar Charts, KPI Cards, Donut Charts, and Map Charts.



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	A	B	C	D	E	F	G	H	I	J	K
1	State Name	PC Name	Candidate Name	Gende	Age	Categor	Party Name	Party Symbol	Total Votes Polled In The Constituen	Valid Vote	Votes Secured - Gener
2	Andhra Pradesh	Araku	GUMMA THANUJA RANI	FEMALE	31	ST	YSRCP	Ceiling fan	1165787	1113975	471470
3	Andhra Pradesh	Araku	KOTHAPALLI GEETHA	FEMALE	53	ST	BJP	Lotus	1165787	1113975	417113
4	Andhra Pradesh	Araku	APPALANARASA PACHIPENTA	MALE	41	ST	CPI(M)	Hammer, Sickle and Star	1165787	1113975	119016
5	Andhra Pradesh	Araku	NOTA	NA	NA	NA	NOTA	NOTA	1165787	1113975	50205
6	Andhra Pradesh	Araku	AVASHYA LAHARI . VARAM	FEMALE	30	ST	BSP	Elephant	1165787	1113975	24858
7	Andhra Pradesh	Araku	SAMAREDDY BALAKRISHNA	MALE	48	ST	IND	Gas cylinder	1165787	1113975	9493
8	Andhra Pradesh	Araku	NIMMAKA JAYARAJU	MALE	64	ST	IND	Bat	1165787	1113975	8798
9	Andhra Pradesh	Araku	ATHIDHI	FEMALE	32	ST	IND	Plate containing food	1165787	1113975	8121
10	Andhra Pradesh	Araku	CHANTI BADNAINA	MALE	28	ST	JBNP	Battery Torch	1165787	1113975	7205
11	Andhra Pradesh	Araku	MOTTADAM . RAJABABU	MALE	47	ST	BHRTADVSIP	Hockey and ball	1165787	1113975	6370
12	Andhra Pradesh	Araku	RANJITH KUMAR PALAKA	MALE	42	ST	IND	Biscuit	1165787	1113975	6000
13	Andhra Pradesh	Araku	MANDALA GIRIDHARA RAO	MALE	42	ST	IND	Belt	1165787	1113975	4931
14	Andhra Pradesh	Araku	RAMBABU JALLI	MALE	45	ST	TLRDSMTP	Rubber stamp	1165787	1113975	4933
15	Andhra Pradesh	Araku	VUYAKA NIREEKSHAN (V. CHENCHU)	MALE	43	ST	IPBP	Trumpet	1165787	1113975	4500
16	Andhra Pradesh	Srikakulam	KINJARAPU RAMMOHAN NAIDU	MALE	36	GENERAL	TDP	Bicycle	1241169	1211081	734501
17	Andhra Pradesh	Srikakulam	TILAK PERADA	MALE	50	GENERAL	YSRCP	Ceiling fan	1241169	1211081	420394
18	Andhra Pradesh	Srikakulam	NOTA	NA	NA	NA	NOTA	NOTA	1241169	1211081	24498
19	Andhra Pradesh	Srikakulam	PEDADA PARAMESWARA RAO	MALE	59	GENERAL	INC	Hand	1241169	1211081	6724
20	Andhra Pradesh	Srikakulam	SANAPALA SRAVAN KUMAR	MALE	38	GENERAL	IND	Bangles	1241169	1211081	5950
21	Andhra Pradesh	Srikakulam	NAIDUGARI RAJASEKHAR	MALE	40	GENERAL	BSP	Elephant	1241169	1211081	4661
22	Andhra Pradesh	Srikakulam	VABA YOGESWARA RAO	MALE	39	ST	IND	Road roller	1241169	1211081	3472
23	Andhra Pradesh	Srikakulam	BETHA VIVEKANANDA MAHARAJ	MALE	38	GENERAL	IND	Matchbox	1241169	1211081	2523
24	Andhra Pradesh	Srikakulam	YEDDU LAKSHMINARAYANA	MALE	66	GENERAL	IND	Sewing machine	1241169	1211081	1598
25	Andhra Pradesh	Srikakulam	BORUBADRA CHANDRAKALA	FEMALE	37	GENERAL	BCYP	Ganna kisan	1241169	1211081	1315
26	Andhra Pradesh	Srikakulam	IPPILI SEETHARAJU	MALE	47	GENERAL	JBNP	Battery Torch	1241169	1211081	1080
27	Andhra Pradesh	Srikakulam	KAYA DURGARAO	MALE	34	SC	NRCP	Bucket	1241169	1211081	811
28	Andhra Pradesh	Srikakulam	CHELLURI DANIYAL	MALE	49	SC	IND	Scissors	1241169	1211081	796
29	Andhra Pradesh	Srikakulam	BOMMALI TIRUPATI RAO	MALE	29	GENERAL	PPOI	Flute	1241169	1211081	589
30	Andhra Pradesh	Vizianagaram	APPALANAIDU KALISETTI	MALE	50	GENERAL	TDP	Bicycle	1307632	1275992	729284
31	Andhra Pradesh	Vizianagaram	BELLANA CHANDRASEKHAR	MALE	62	GENERAL	YSRCP	Ceiling fan	1307632	1275992	487691
32	Andhra Pradesh	Vizianagaram	NOTA	NA	NA	NA	NOTA	NOTA	1307632	1275992	23097
33	Andhra Pradesh	Vizianagaram	BOBBILI SRINU	MALE	33	GENERAL	INC	Hand	1307632	1275992	10270
34	Andhra Pradesh	Vizianagaram	PEERUBANDI PRAKASH RAO	MALE	69	SC	BSP	Elephant	1307632	1275992	7985
35	Andhra Pradesh	Vizianagaram	VELURI VENKATA TRINADHARAO	MALE	58	GENERAL	IND	Sitar	1307632	1275992	4146
36	Andhra Pradesh	Vizianagaram	ALLU SRIRAMULU	MALE	48	GENERAL	IND	Baby walker	1307632	1275992	3396
37	Andhra Pradesh	Vizianagaram	SIYYADULA YELLA RAO	MALE	42	SC	IND	Telephone	1307632	1275992	3105
38	Andhra Pradesh	Vizianagaram	SRINIVASA RAO SAMBHANA (VASU)	MALE	45	GENERAL	YGATLSIP	Road roller	1307632	1275992	1758
39	Andhra Pradesh	Vizianagaram	MARISERLA KRISHNAMURTHY NAIDU	MALE	50	GENERAL	IND	Pot	1307632	1275992	1617
40	Andhra Pradesh	Vizianagaram	VANGAPANDU MAHESWARA RAO	MALE	37	GENERAL	NBBHNRSVP	Television	1307632	1275992	1544
41	Andhra Pradesh	Vizianagaram	CHINNAM ARUNA KUMAR	MALE	46	SC	JRBP	Coat	1307632	1275992	1401
42	Andhra Pradesh	Vizianagaram	ATCHIYYA NAIDU SAMIREDDY	MALE	55	GENERAL	SP	Bicycle pump	1307632	1275992	1059
43	Andhra Pradesh	Vizianagaram	ADINARAYANA TADDI	MALE	61	GENERAL	IND	Belt	1307632	1275992	855
44	Andhra Pradesh	Vizianagaram	P V A ANANDA SAGAR	MALE	60	GENERAL	IND	Cot	1307632	1275992	787
45	Andhra Pradesh	Vizianagaram	SAKHINETI ANANTHA RAJU	MALE	50	GENERAL	PPOI	Flute	1307632	1275992	715
46	Andhra Pradesh	Visakhapatnam	SRIBHARAT MATHUKUMILI	MALE	35	GENERAL	TDP	Bicycle	1391130	1381812	893884
47	Andhra Pradesh	Visakhapatnam	JHANSI LAKSHMI. BOTCHA.	FEMALE	61	GENERAL	YSRCP	Ceiling fan	1391130	1381812	397821
48	Andhra Pradesh	Visakhapatnam	P. SATYA REDDY	MALE	52	GENERAL	INC	Hand	1391130	1381812	29430
49	Andhra Pradesh	Visakhapatnam	K.A. PAUL	MALE	60	GENERAL	PRSHP	Pot	1391130	1381812	7529
50	Andhra Pradesh	Visakhapatnam	PEDAPENKI SIVA PRASADA RAO	MALE	57	GENERAL	BSP	Elephant	1391130	1381812	6006
51	Andhra Pradesh	Visakhapatnam	NOTA	NA	NA	NA	NOTA	NOTA	1391130	1381812	5171
52	Andhra Pradesh	Visakhapatnam	BIKKAVOLU. CHALAMAJI	MALE	43	GENERAL	NRCP	Bucket	1391130	1381812	4883

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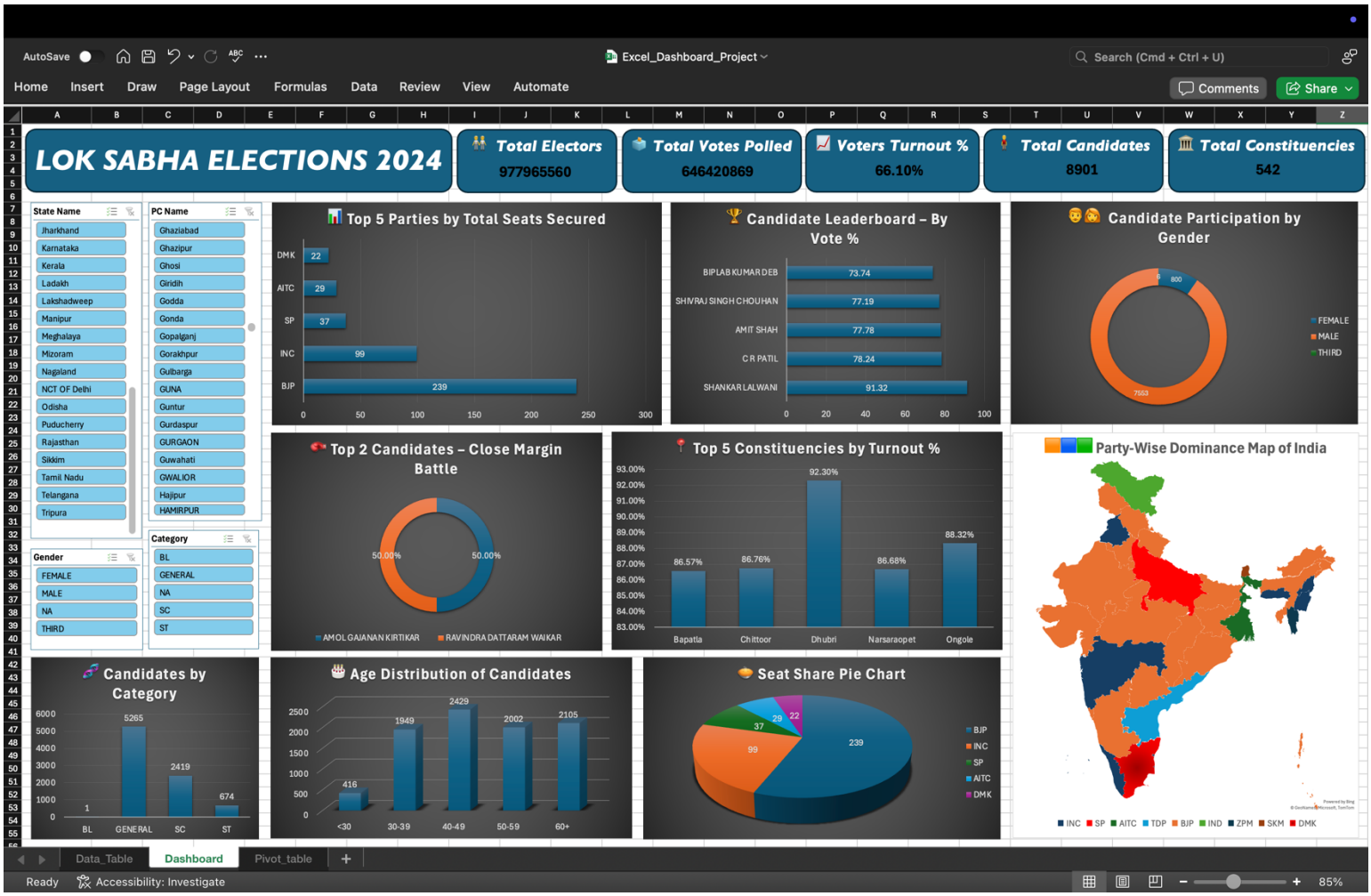
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LOK SABHA ELECTIONS 2024
Total Electors
977965560
Total Votes Polled
646420869
Voters Turnout %
66.10%
Total Candidates
8901
Total Constituencies
542
State Name
Jharkhand
Karnataka
Kerala
Ladakh
Lakshadweep
Manipur
Meghalaya
Mizoram
Nagaland
NCT OF Delhi
Odisha
Puducherry
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
PC Name
Ghaziabad
Ghazipur
Ghosi
Giridih
Godda
Gonda
Gopalganj
Gorakhpur
Gulbarga
GUNA
Guntur
Gurdaspur
GURGAON
Guwahati
GWALIOR
Hajipur
HAMIRPUR
Gender
FEMALE
MALE
NA
THIRD
Category
BL
GENERAL
NA
SC
ST
Top 5 Parties by Total Seats Secured
DMK 22
AITC 29
SP 37
INC 99
BJP 239
0 50 100 150 200 250 300
Candidate Leaderboard – By Vote %
BIPLAB KUMAR DEB 73.74
SHIVRAJ SINGH CHOUHAN 77.19
AMIT SHAH 77.78
C R PATIL 78.24
SHANKAR LALWANI 91.32
0 20 40 60 80 100
Candidate Participation by Gender
800
7553
FEMALE
MALE
THIRD
Top 2 Candidates – Close Margin Battle
50.00%
50.00%
AMOL GAJANAN KIRTIKAR
RAVINDRA DATTARAM WAIKAR
Top 5 Constituencies by Turnout %
93.00%
92.00%
91.00%
90.00%
89.00%
88.00%
87.00%
86.00%
85.00%
84.00%
83.00%
86.57%
86.76%
92.30%
86.68%
88.32%
Bapatla
Chittoor
Dhubri
Narsaraopet
Ongole
Party-Wise Dominance Map of India
INC SP AITC TDP BJP IND ZPM SKM DMK
Candidates by Category
6000
5000
4000
3000
2000
1000
0
1
5265
2419
674
BL
GENERAL
SC
ST
Age Distribution of Candidates
2500
2000
1500
1000
500
0
416
1949
2429
2002
2105
<30
30-39
40-49
50-59
60+
Seat Share Pie Chart
239
99
37
29
22
BJP
INC
SP
AITC
DMK
Data_Table
Dashboard
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Ready
Accessibility: Investigate
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Objectives:

1. Objective: **KPI Overview**

i. **Introduction**

This objective focuses on summarizing the most important metrics of the Lok Sabha Elections 2024, presented at the top of the dashboard in the form of KPI (Key Performance Indicator) cards. These indicators offer a high-level snapshot of the national election statistics and help establish the scale and participation in the democratic process.

ii. **General Description**

The dashboard displays six KPI cards including Total Electors, Total Votes Polled, Voter Turnout %, Total Valid Votes, Total Candidates, and Total Constituencies. These cards are visually highlighted using bold formatting and background fills for immediate visibility. The metrics are automatically updated based on slicer selections, enabling users to view dynamic summaries for specific states or filters.

iii. **Analysis Results**

As per the final dashboard calculations, the total number of electors recorded in the country was approximately 977 million, with around 646 million total votes polled, resulting in a voter turnout rate of 66.10%. The total valid votes stood at 623 million, with 8,901 candidates contesting across 542 constituencies. These metrics underline the massive scale of the election and form the baseline for more detailed state-wise and candidate-level analysis.

iv. Visualization

Row Labels	Sum of Total Electors(Unique)	Sum of Total Votes Polled In The Constituency(Unique)	Sum of Valid Votes(Unique)	Count of Candidate Name
Punjab	21567196	13542849	13463765	341
Uttar Pradesh	154403112	87997543	87274787	931
West Bengal	76124780	60554535	59958733	549
Andhra Pradesh	41401887	33858957	33327256	479
Maharashtra	93061760	57248402	56763551	1169
Madhya Pradesh	56668852	37972368	37406546	398
Uttarakhand	8431101	4864181	4783497	60
Himachal Pradesh	5711969	4081076	4046781	41
Bihar	77259579	43480859	42549333	537
Andaman & Nicobar Islands	315745	202597	200705	13
Arunachal Pradesh	898442	728393	716056	16
Assam	24572114	20118166	19819569	157
Chandigarh	660552	449383	446363	20
Chhattisgarh	20678667	15083307	14925237	231
Dadra & Nagar Haveli and Daman & Diu	417236	298073	291869	14
Goa	1179644	908178	896119	18
Gujarat	48009945	29161987	28655853	290
Haryana	20187911	13075630	13012030	233
Jammu and Kashmir	8802348	5162866	5116405	105
Jharkhand	25877892	17279192	17046517	258
Karnataka	54772332	38835377	38575274	502
Kerala	27807008	20033258	19821980	214
Ladakh	190576	135662	134612	4
Lakshadweep	57953	49247	49067	5
Manipur	2051357	1605769	1582610	12
Meghalaya	2230451	1715027	1695119	12
Mizoram	861327	491828	489443	7
Nagaland	1325383	766573	759150	4
NCT OF Delhi	15214638	8943585	8892762	169
Odisha	33716965	25214359	24801399	228
Puducherry	1024024	811432	798177	27
Rajasthan	53508010	33211938	32885413	291
Sikkim	466643	388507	382366	15
Tamil Nadu	62404947	43769106	43206980	989
Telangana	33232318	22031832	21904129	542
Tripura	2870896	2348827	2311239	20
Grand Total	977965560	646420869	638990692	8901

Total Electors	Total Votes Polled	Voters Turnout %	Total Candidates	Total Constituencies
977965560	646420869	66.10%	8901	542

2. Objective: **Party-wise Performance**

i. **Introduction**

This objective analyses the political landscape of India based on the performance of different political parties during the 2024 Lok Sabha Elections. It focuses on party-wise seat allocation and vote share, providing a clear understanding of national and regional political strength using visual tools.

ii. **General Description**

The dashboard includes a dynamic pie chart and bar chart that showcase the total seats won and vote percentages for the top parties, primarily BJP, INC, SP, AITC, and DMK. These visuals are enhanced with slicers that allow state-wise filtering, helping users drill down into regional data. The interactive setup makes it easy to compare party influence across different states.

iii. **Analysis Results**

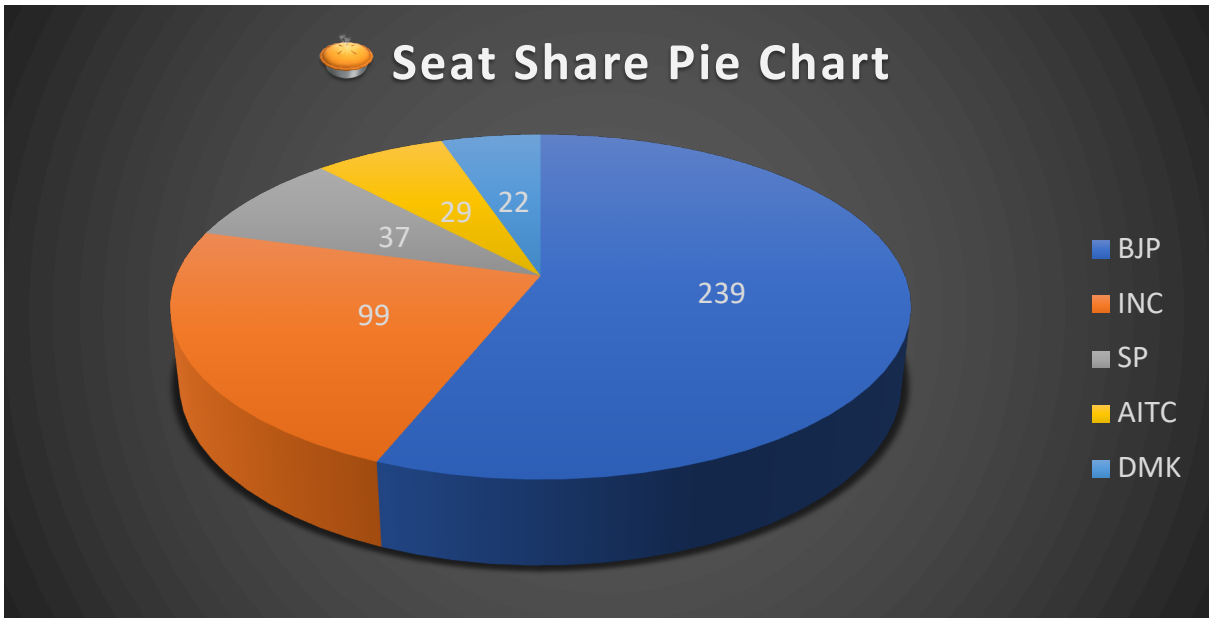
The BJP emerged as the leading party with 239 seats, followed by INC with 99 seats. SP secured 37 seats, AITC 29, and DMK 22. The pie chart clearly demonstrates BJP's national dominance, while the column chart shows vote share gaps between parties. Slicer filters reveal varied party performance across states — for example, AITC's stronghold in West Bengal and DMK's dominance in Tamil Nadu. This analysis helps in understanding voter preference distribution and party regional strengths.

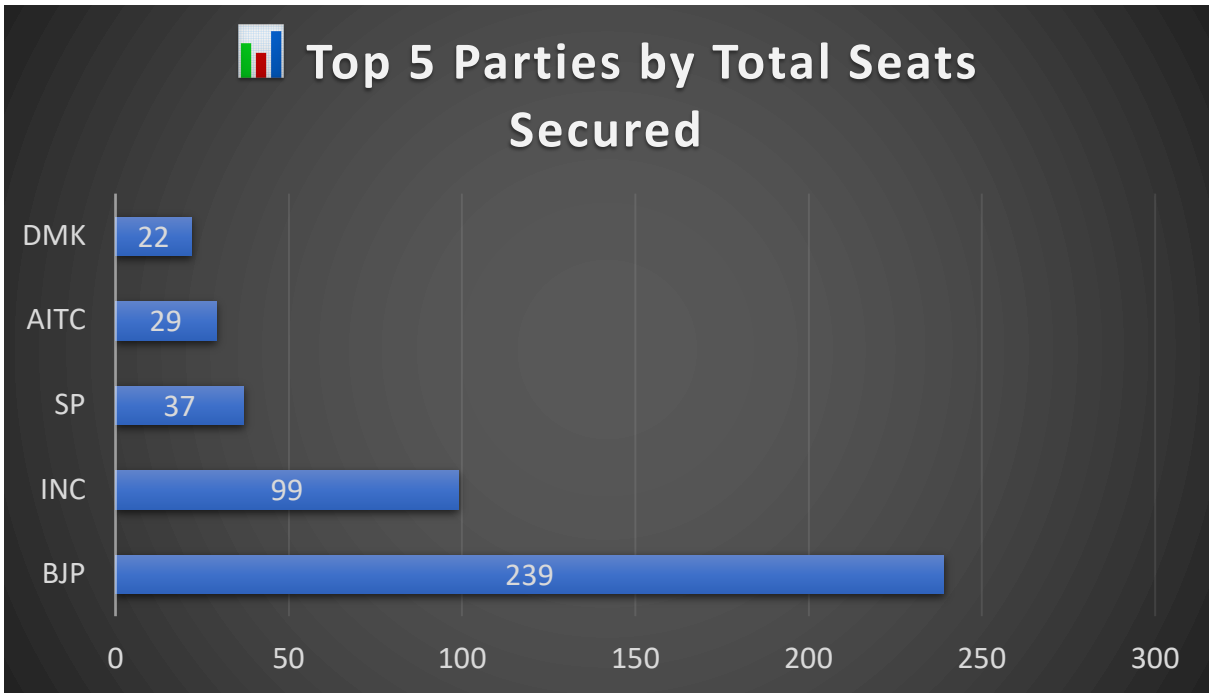
iv. Visualization

[Figure 2: Pie & Bar Charts – Party-wise Seat and Vote Share] – A combination of pie and vertical bar charts. The pie chart displays percentage of total seats won by each party while the bar chart reflects comparative vote share. State slicers dynamically adjust the visuals for region-specific analysis.

The BJP emerged as the leading party with 239 seats, followed by INC with 99 seats. SP secured 37 seats, AITC 29, and DMK 22. The pie chart clearly demonstrates BJP's national dominance, while the column chart shows vote share gaps between parties. Slicer filters reveal varied party performance across states — for example, AITC's stronghold in West Bengal and DMK's dominance in Tamil Nadu. This analysis helps in understanding voter preference distribution and party regional strengths.

Is Winner	Winner
Row Labels	**Sum of Constituency count**
BJP	239
INC	99
SP	37
AITC	29
DMK	22
Grand Total	**426**





3. Objective: **State-wise Analysis**

i. **Introduction**

This objective focuses on understanding the electoral behaviour and regional patterns across Indian states during the 2024 Lok Sabha Elections. It highlights turnout percentages, vote distribution, and the most dominant party in each state to analyse how different regions participated and voted.

ii. **General Description**

The dashboard presents a comprehensive view of state-wise turnout using bar charts and maps. Total votes polled, percentage turnout, and state-wise winners are displayed interactively. A dynamic map chart shows party dominance by state, offering quick visual recognition of political strongholds. Slicers allow filtering by party to explore their geographic impact.

iii. **Analysis Results**

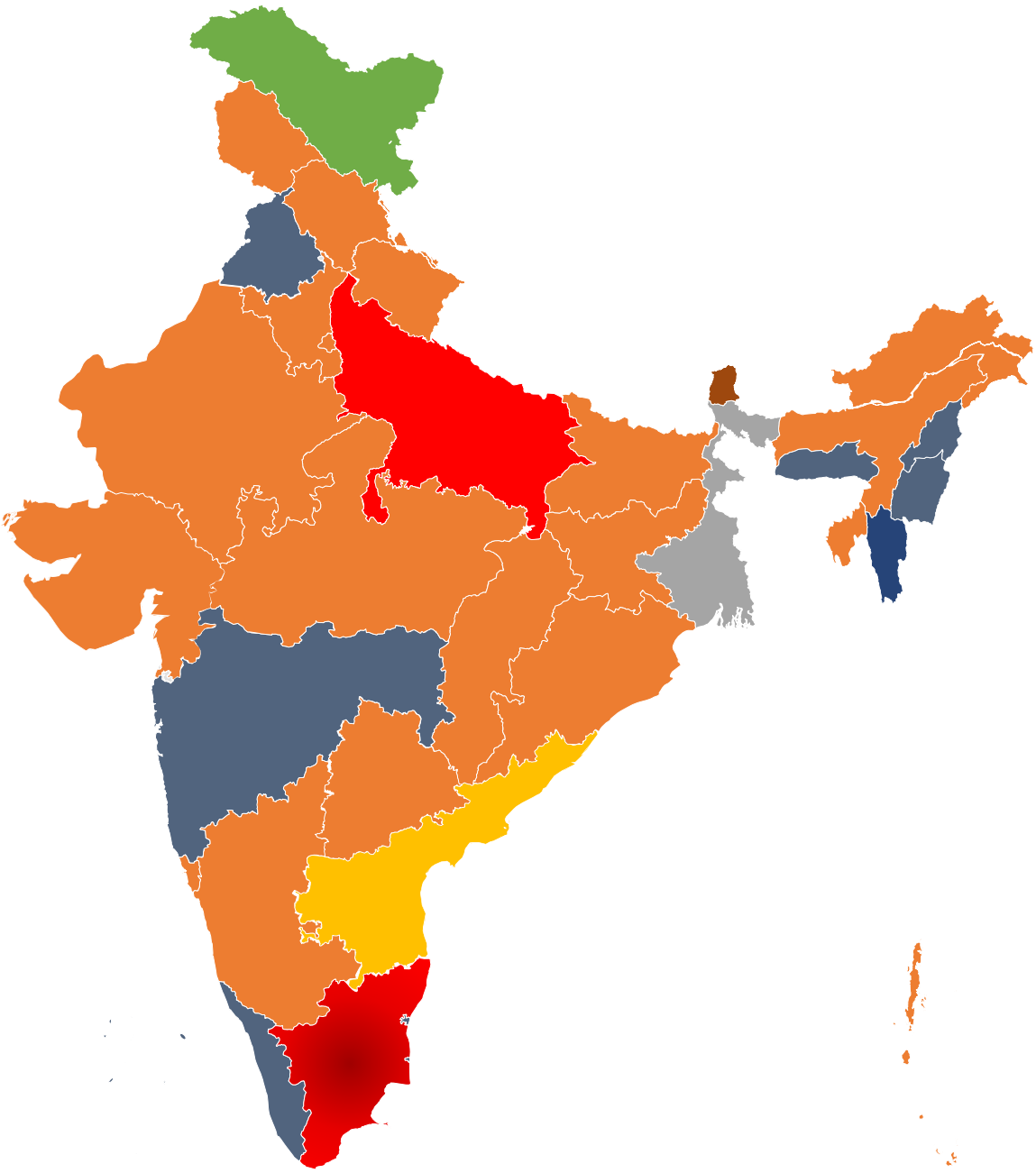
States like Nagaland, Lakshadweep, and Tripura recorded the highest turnout, while urban states such as Maharashtra and Delhi showed moderate to lower participation. BJP was dominant across several northern and central states, whereas DMK led in Tamil Nadu and AITC in West Bengal. These variations highlight the importance of local party presence and regional issues influencing voter turnout and party success.

iv. **Visualization**

[Figure 3: State-wise Party Dominance Map] – A color-coded map showing each state shaded in the colour of the party with the most seats, such as saffron for BJP, blue for INC, green for SP, etc. Users can interact with slicers to view how each party performed across different states.

State Name	Winner Part
Punjab	INC
Uttar Pradesh	SP
West Bengal	AITC
Andhra Pradesh	TDP
Maharashtra	INC
Madhya Pradesh	BJP
Uttarakhand	BJP
Himachal Pradesh	BJP
Bihar	BJP
Andaman & Nicobar Islands	BJP
Arunachal Pradesh	BJP
Assam	BJP
Chandigarh	INC
Chhattisgarh	BJP
Dadra & Nagar Haveli and Da	BJP
Goa	BJP
Gujarat	BJP
Haryana	BJP
Jammu and Kashmir	BJP
Jharkhand	BJP
Karnataka	BJP
Kerala	INC
Ladakh	IND
Lakshadweep	INC
Manipur	INC
Meghalaya	INC
Mizoram	ZPM
Nagaland	INC
NCT OF Delhi	BJP
Odisha	BJP
Puducherry	INC
Rajasthan	BJP
Sikkim	SKM
Tamil Nadu	DMK
Telangana	BJP
Tripura	BJP

Party-Wise Dominance Map of India



4. Objective: **Candidate Leaderboard**

i. **Introduction**

This objective identifies the top-performing candidates across all constituencies in the 2024 Lok Sabha Elections. It measures performance based on total votes received and percentage of total votes secured.

ii. **General Description**

The leaderboard uses bar charts and sorted pivot tables to display the top 10 candidates by votes and vote percentage. It includes slicers for gender, category, and state filters to explore demographic differences.

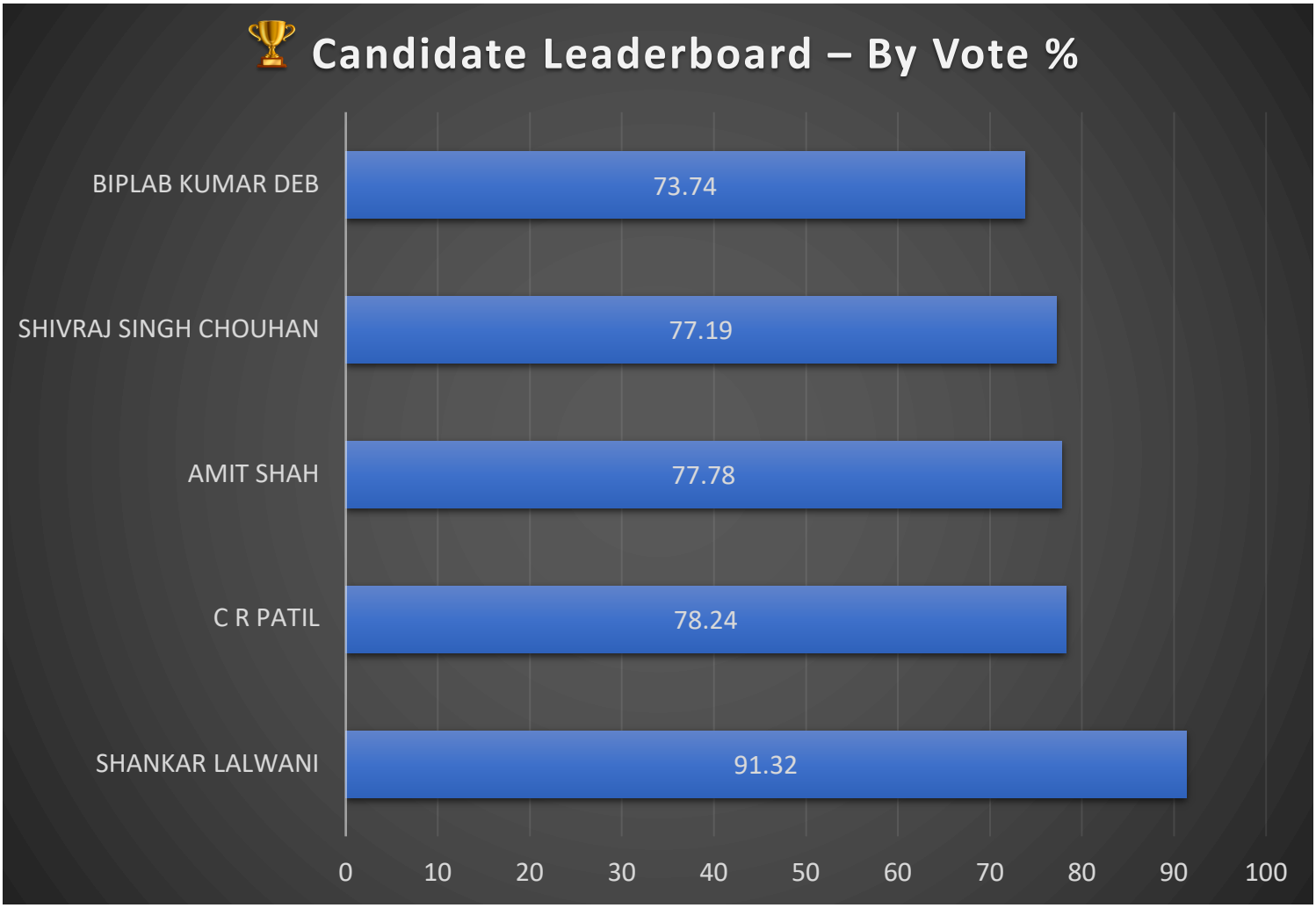
iii. **Analysis Results**

Shankar Lalwani secured the highest vote percentage (91.32%), followed by CR Patil and Amit Shah. The top candidates generally represented major parties like BJP and INC and came from both North and West India. Gender and category analysis showed a performance gap across demographic lines.

iv. **Visualization**

[Figure 4: Bar Chart – Top Candidates by Vote %] – Vertical bars representing individual vote share percentages with candidate names on the x-axis.

Row Labels	Max. of Over Total Valid Votes Polled In Constituency
SHANKAR LALWANI	91.32
C R PATIL	78.24
AMIT SHAH	77.78
SHIVRAJ SINGH CHOUHAN	77.19
BIPLAB KUMAR DEB	73.74
Grand Total	**91.32**


Candidate Leaderboard – By Vote %
BIPLAB KUMAR DEB
73.74
SHIVRAJ SINGH CHOUHAN
77.19
AMIT SHAH
77.78
C R PATIL
78.24
SHANKAR LALWANI
91.32
0
10
20
30
40
50
60
70
80
90
100

5. Objective: **Voter Turnout Insight**

i. **Introduction**

This objective analyses voter participation by highlighting constituencies with the highest and lowest turnout percentages in the 2024 elections. It brings attention to regional engagement and democratic participation.

ii. **General Description**

A bar chart and conditional formatting table display turnout statistics per constituency. Constituencies are ranked based on turnout percentage and categorized into high, moderate, and low engagement.

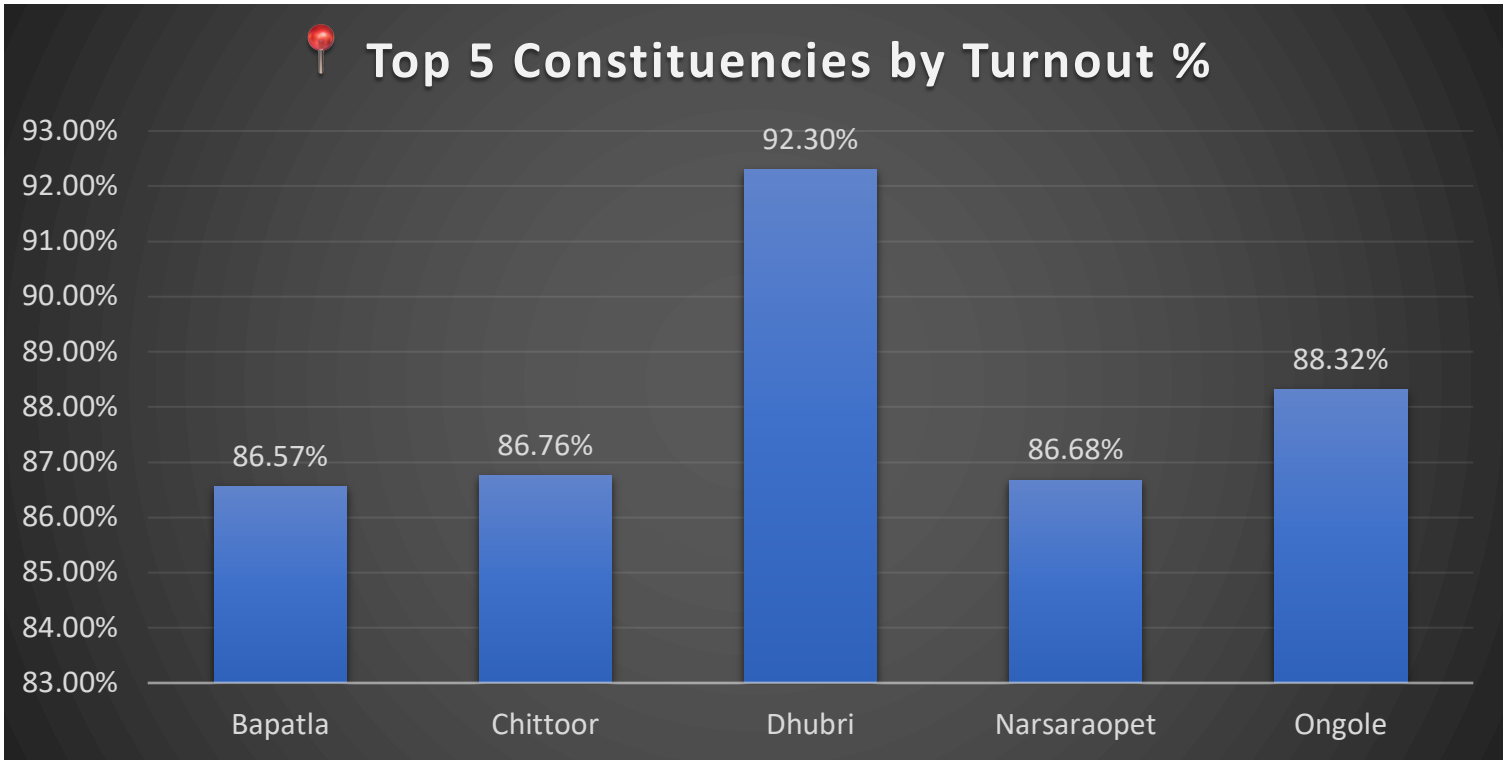
iii. **Analysis Results**

Dhubri in Assam recorded the highest turnout (92.30%), followed by multiple constituencies in Andhra Pradesh. Lower turnout was observed in some urban constituencies. These results may reflect urban apathy or regional political climates.

iv. **Visualization**

[Figure 5: Conditional Format Table – Turnout % by PC] – A heatmap-style table with turnout bands (green >70%, yellow 50–70%, red <50%).

State Name	(All)
Row Labels	**Max. of % turnout (unique)**
Bapatla	86.57%
Chittoor	86.76%
Dhubri	92.30%
Narsaraopet	86.68%
Ongole	88.32%
Grand Total	**92.30%**


Top 5 Constituencies by Turnout %
93.00%
92.00%
91.00%
90.00%
89.00%
88.00%
87.00%
86.00%
85.00%
84.00%
83.00%
86.57%
86.76%
92.30%
86.68%
88.32%
Bapatla
Chittoor
Dhubri
Narsaraopet
Ongole

6. Objective: **Demographic Analysis**

i. **Introduction**

This objective examines the diversity of candidates in terms of gender, category (SC/ST/OBC/GEN), and age. It reflects on inclusivity and demographic representation in the 2024 Lok Sabha elections.

ii. **General Description**

Pie charts, bar charts, and histograms were used to analyse gender distribution, category-wise candidate numbers, and age group segmentation. This offers a sociological view of the political field.

iii. **Analysis Results**

Male candidates dominated the elections, with a relatively small proportion of female and third-gender participants. General and OBC categories formed the majority, and most candidates belonged to the 40–49 age group.

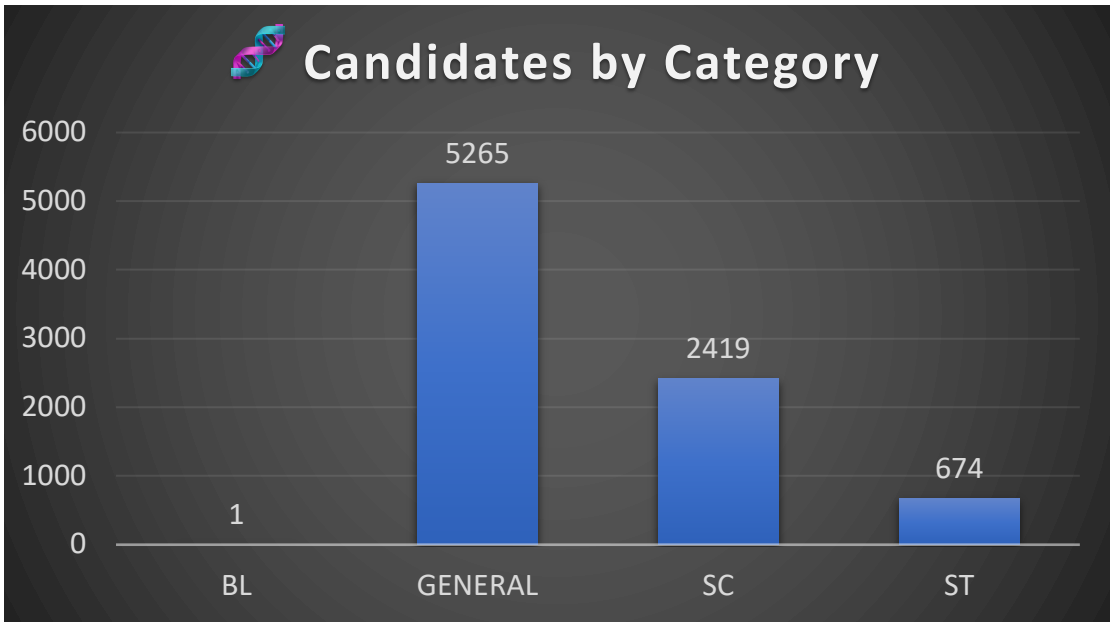
iv. **Visualization**

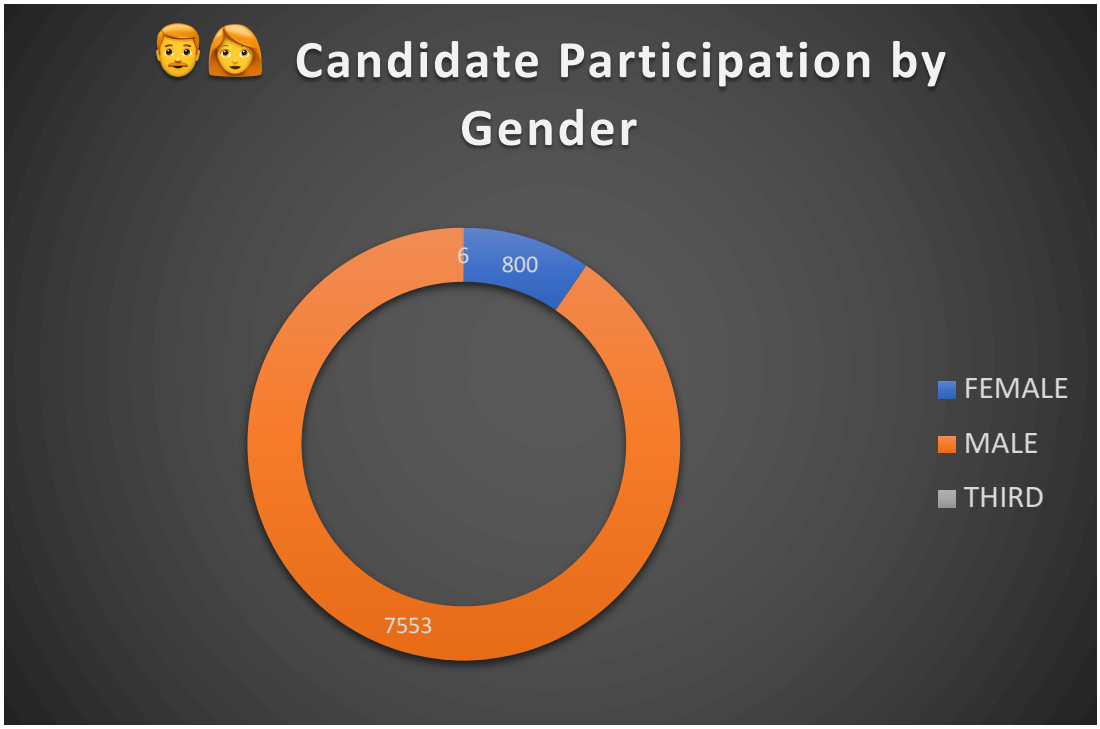
[Figure 6: Histogram – Age Distribution of Candidates] – Bars grouped by age intervals (30–39, 40–49, etc.) showing frequency.

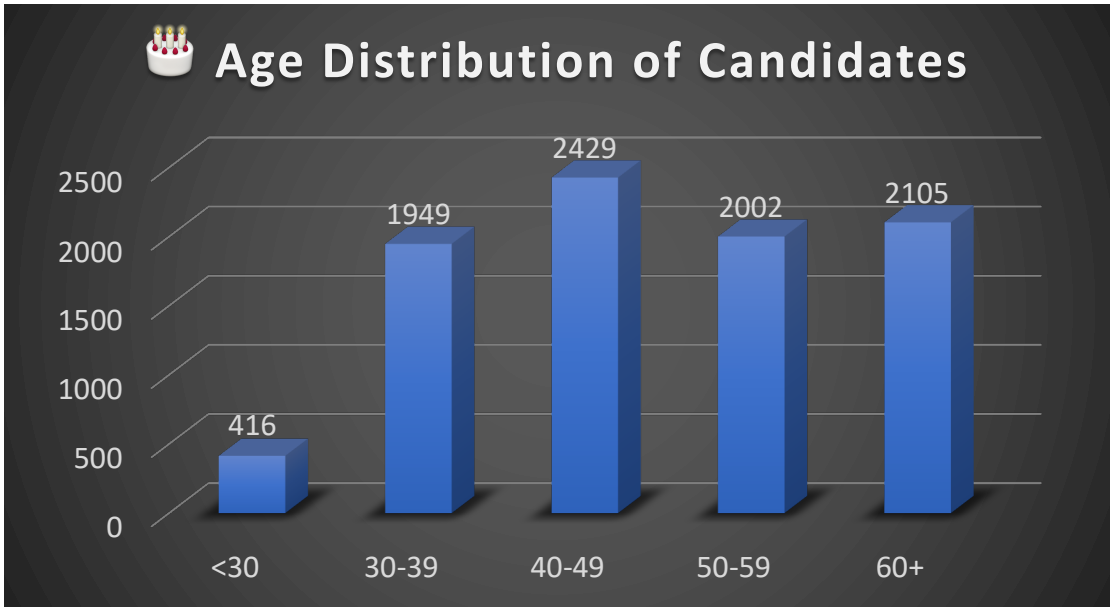
Row Labels	Count of Candidate Name
FEMALE	800
MALE	7553
THIRD	6
Grand Total	**8359**

Row Labels	Count of Candidate Name
BL	1
GENERAL	5265
SC	2419
ST	674
Grand Total	**8359**

Row Labels	Count of Candidate Name
<30	416
30-39	1949
40-49	2429
50-59	2002
60+	2105
Grand Total	**8901**




Candidate Participation by Gender
6
800
7553
FEMALE
MALE
THIRD


Age Distribution of Candidates
2500
2000
1500
1000
500
0
416
1949
2429
2002
2105
<30
30-39
40-49
50-59
60+

7. Objective: **Close Contests**

i. **Introduction**

This objective highlights electoral constituencies where the margin of victory was less than 5%, indicating tightly fought political battles during the 2024 elections.

ii. **General Description**

Donut charts and bar charts were used to visualize the winner and runner-up in close contests. A helper column was created to calculate margin and rank candidates accordingly. The dashboard includes slicers for state-wise filtering.

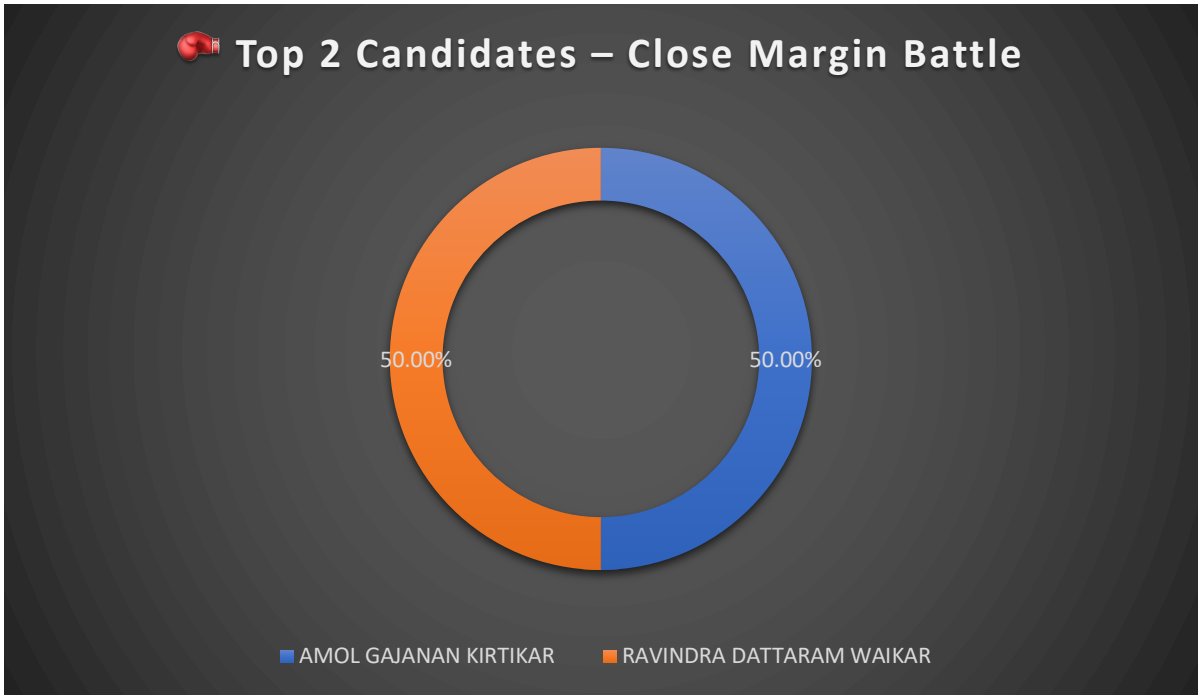
iii. **Analysis Results**

Constituencies like Mumbai North West saw extremely narrow margins. In some cases, runner-up vote share was just a few hundred votes behind the winner. These insights point to high voter engagement and competitive races.

iv. **Visualization**

[Figure 7: Donut Chart – Winner vs Runner-up Vote %] – A 50–50 style circular chart showing vote split in marginal constituencies.

Row Labels	Sum of %Margi	Min. of Margin
AMOL GAJANAN KIRTIKAR	50.00%	48
RAVINDRA DATTARAM WAIKAR	50.00%	



Interactive Elements Supporting Objectives

To enhance interactivity and allow for flexible visual analysis, multiple slicers were implemented across the dashboard:

• **State Name Slicer** – Enables users to filter and explore data on a state-wise basis, affecting objectives such as Party Performance (Obj 1), State-wise Turnout (Obj 2), and Candidate Leaderboards (Obj 3). • **PC Name Slicer** – Allows deep diving into specific parliamentary constituencies, particularly useful for analysing turnout, margins, and candidate-level data (Obj 3, Obj 4, Obj 6). • **Gender Slicer** – Filters candidate data based on gender, supporting demographic analysis and leaderboards by gender for Obj 3 and Obj 5. • **Category Slicer** – Helps analyse the performance and participation of candidates across different social categories (General, SC, ST, OBC), aiding insights in Obj 3 and Obj 5.

These slicers contribute significantly to the dashboard's interactivity, making the visuals responsive and user-centric.

State Name
Punjab
Uttar Pradesh
West Bengal
Andhra Pradesh
Maharashtra
Madhya Pradesh
Uttarakhand
Himachal Pradesh
Bihar
Andaman &...
Arunachal Pradesh
Assam
Chandigarh
Chhattisgarh
Dadra & Nagar...
Goa
Gujarat
Haryana
PC Name
Ghaziabad
Ghazipur
Ghosi
Giridih
Godda
Gonda
Gopalganj
Gorakhpur
Gulbarga
GUNA
Guntur
Gurdaspur
GURGAON
Guwahati
GWALIOR
Hajipur
HAMIRPUR
Gender
FEMALE
MALE
NA
THIRD
Category
BL
GENERAL
NA
SC
ST

5. Conclusion

5.1 Summary of Findings

The LOK SABHA ELECTIONS 2024 DASHBOARD, built entirely in Microsoft Excel, offers an in-depth and interactive visualization of India's largest democratic exercise. Using pivot tables, slicers, and advanced charting tools, the dashboard breaks down critical election metrics across multiple dimensions including party performance, state-wise turnout, candidate demographics, and contest margins.

Key highlights include:

- The BJP emerged as the single largest party with 239 seats, followed by INC with 99, and strong performances by regional parties like SP, AITC, and DMK.
- Voter turnout stood at approximately 66.10%, with the highest participation recorded in constituencies like Dhubri and Ongole.
- The candidate leaderboard revealed high vote percentages among BJP candidates, including Shankar Lalwani and Amit Shah.
- Close contests in seats like Mumbai North West demonstrated intense competition, while the "Most Valuable Vote Index" highlighted constituencies where each vote carried the most weight.
- Demographic insights revealed an underrepresentation of female and third-gender candidates and a concentration of candidates in the 40–49 age bracket.

Excel's features such as conditional formatting, interactive slicers, and map charts were utilized to deliver a dynamic storytelling experience. The use of real data sourced from the Election Commission provided authenticity to the project.

5.2 Implications

The dashboard has implications for multiple stakeholders:

- **Political analysts and journalists** can use it to interpret party-wise trends and public sentiment across regions.
- **Researchers** can explore gender and category-wise representation and electoral participation.
- **Educators** can employ the dashboard as a tool to teach data visualization and storytelling using Excel.
- The insights derived also point to potential areas of civic improvement, such as low turnout zones or uncompetitive constituencies, where awareness and voter engagement programs can be focused.

Overall, the dashboard demonstrates the strength of Excel as a tool not just for spreadsheets, but for building full-fledged, insight-rich analytical products.

6. Future Scope

- Compare 2024 results with 2019 to show seat swings
- Add a party-wise performance over decades using historical data
- Automate refresh with Power Query or VBA
- Deploy to web via Power BI for real-time usage

7. References

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