



LOK SABHA ELECTION ANALYSIS

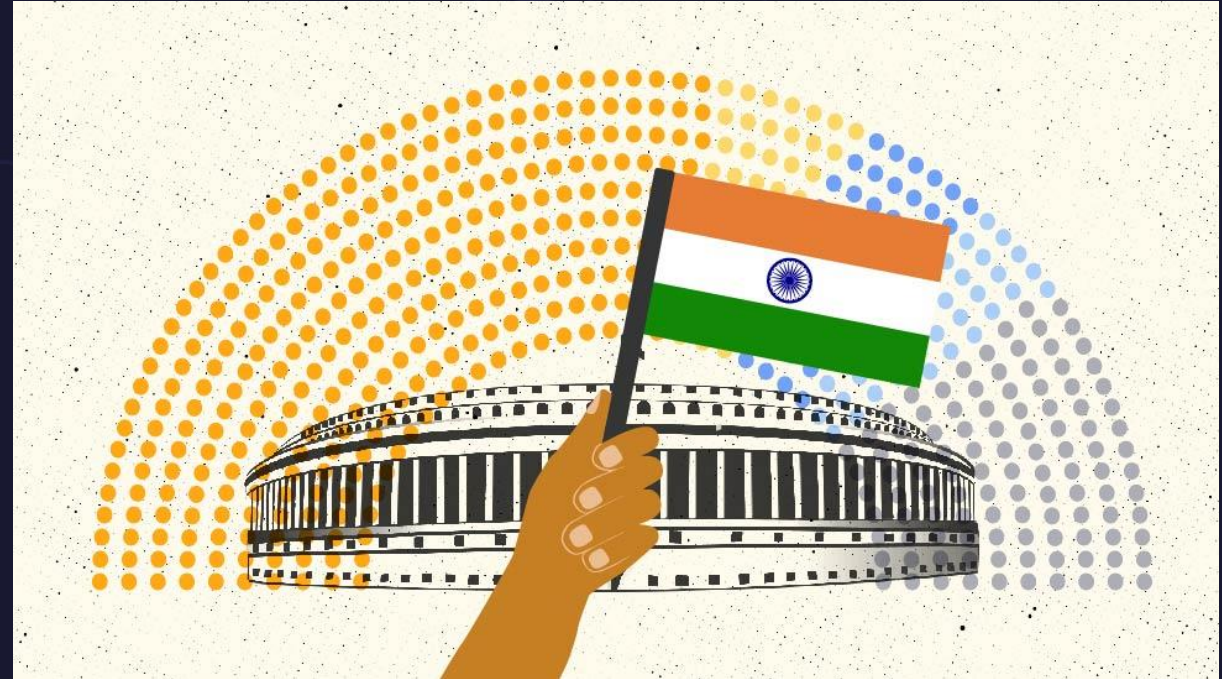
CODEBASICS RESUME PROJECT CHALLENGE 11



Presented by
Mohan Nagrurkar

INDEX

- Overview
- Objectives
- Dataset overview
- Data Cleaning
- DAX Queries
- Power BI
- Observations
- Recommendations



OVERVIEW



- AtliQ Media is a private media company and they wanted to telecast a show on Lok Sabha elections 2024 in India.
- They wanted to present insights from 2014 and 2019 elections without any bias and discuss less explored themes like voter turnout percentage in India.
- The data analyst in the company is handed over this task of generating meaningful insights from data.

OBJECTIVES



- Clean and prepare data from datasets of Lok Sabha elections 2014 and 2019.
- Create data driven metrics and visuals for analysis.
- Get meaningful data and turn them into interactive insights
- Create Dashboards and KPIs for better understandings



DATASET OVERVIEW



- Datasets of Lok Sabha elections 2014 and 2019 is provided which is taken from the Election Commission of India. These are available for public access.
- The Dataset consists of columns titled- State, Constituency, Candidate Name, Gender, Age, Category, Party, Party Symbol, General Votes, Postal Votes, Total Votes, Total Electors.

SAMPLE DATASET



	<div>⌵</div> <div>A^B_C State</div>	<div>⌵</div> <div>A^B_C Constituency</div>	<div>⌵</div> <div>A^B_C Candidate</div>	<div>⌵</div> <div>A^B_C Gender</div>	<div>⌵</div> <div>1²₃ Age</div>	<div>⌵</div> <div>A^B_C Category</div>	<div>⌵</div> <div>A^B_C Party</div>	<div>⌵</div> <div>A^B_C Party_symbol</div>	<div>⌵</div> <div>1²₃ General_votes</div>	<div>⌵</div> <div>1²₃ Postal_votes</div>	<div>⌵</div> <div>1²₃ Total_votes</div>	<div>⌵</div> <div>1²₃ Total_electors</div>
	<div>● Valid</div> <div>● Error</div> <div>● Empty</div>	<div>100%</div> <div>0%</div> <div>0%</div>	<div>● Valid</div> <div>● Error</div> <div>● Empty</div>	<div>100%</div> <div>0%</div> <div>0%</div>	<div>● Valid</div> <div>● Error</div> <div>● Empty</div>	<div>100%</div> <div>0%</div> <div>0%</div>	<div>● Valid</div> <div>● Error</div> <div>● Empty</div>	<div>93%</div> <div>0%</div> <div>7%</div>	<div>● Valid</div> <div>● Error</div> <div>● Empty</div>	<div>100%</div> <div>0%</div> <div>0%</div>	<div>● Valid</div> <div>● Error</div> <div>● Empty</div>	<div>100%</div> <div>0%</div> <div>0%</div>
1	Andhra Pradesh	Adilabad	GODAM NAGESH	MALE	49	ST	TRS	Car	425762	5085	430847	1386282
2	Andhra Pradesh	Adilabad	NARESH	MALE	37	ST	INC	Hand	257994	1563	259557	1386282
3	Andhra Pradesh	Adilabad	RAMESH RATHOD	MALE	48	ST	TDP	Bicycle	182879	1319	184198	1386282
4	Andhra Pradesh	Adilabad	RATHOD SADASHIV	MALE	55	ST	BSP	Elephant	94363	57	94420	1386282
5	Andhra Pradesh	Adilabad	NETHAWATH RAMDAS	MALE	44	ST	IND	Auto- Rickshaw	41028	4	41032	1386282
6	Andhra Pradesh	Adilabad	PAWAR KRISHNA	MALE	33	ST	IND	Bat	5051	4	5055	1386282
7	Andhra Pradesh	Adilabad	BANKA SAHADEV	MALE	53	ST	IND	Gas Cylinder	4780	7	4787	1386282
8	Andhra Pradesh	Adilabad	MOSALI CHINNAIAH	MALE	40	ST	IND	Almirah	8842	17	8859	1386282
9	Andhra Pradesh	Adilabad	NOTA		null	null	NOTA	nul	17021	63	17084	1386282
10	Andhra Pradesh	Peddapalle	DR.JANAPATI SARAT BABU	MALE	42	SC	TDP	Bicycle	63174	160	63334	1425355
11	Andhra Pradesh	Peddapalle	TAGARAM SHANKAR LAL	MALE	37	SC	BSP	Elephant	9430	19	9449	1425355
12	Andhra Pradesh	Peddapalle	BALKA SUMAN	MALE	31	SC	TRS	Car	563214	2282	565496	1425355
13	Andhra Pradesh	Peddapalle	G. VIVEKANAND	MALE	56	SC	INC	Hand	273441	897	274338	1425355
14	Andhra Pradesh	Peddapalle	KALVALA SHANKAR	MALE	44	SC	PPOI	Television	9288	2	9290	1425355
15	Andhra Pradesh	Peddapalle	KALVALA SANJEEV	MALE	37	SC	RPI	Sewing Machine	8609	0	8609	1425355
16	Andhra Pradesh	Peddapalle	BOTHA VENKATA MALLAIAH	MALE	58	SC	BCUF	Chappals	2245	0	2245	1425355
17	Andhra Pradesh	Peddapalle	J.V. RAJU	MALE	50	SC	NIP	Cup & Saucer	3020	0	3020	1425355
18	Andhra Pradesh	Peddapalle	VENKATA SWAMY INJAM	MALE	42	SC	MaSP	Ring	3861	5	3866	1425355
19	Andhra Pradesh	Peddapalle	VELTHURU MALLAIAH	MALE	57	SC	RP(K)	Auto- Rickshaw	45976	1	45977	1425355
20	Andhra Pradesh	Peddapalle	KAMILLA JAYA RAO	MALE	43	SC	IND	Scissors	2741	1	2742	1425355
21	Andhra Pradesh	Peddapalle	GADDALA VINAY KUMAR	MALE	65	SC	IND	Ceiling Fan	3263	3	3266	1425355
22	Andhra Pradesh	Peddapalle	GORRE RAMESH	MALE	43	SC	IND	Gas Cylinder	2359	2	2361	1425355
23	Andhra Pradesh	Peddapalle	JINNA RAMADEVI	FEMALE	37	SC	IND	Battery Torch	9199	0	9199	1425355
24	Andhra Pradesh	Peddapalle	THALLAPALLI SRINIVAS	MALE	35	SC	IND	Candles	3698	1	3699	1425355

DATASET CLEANING

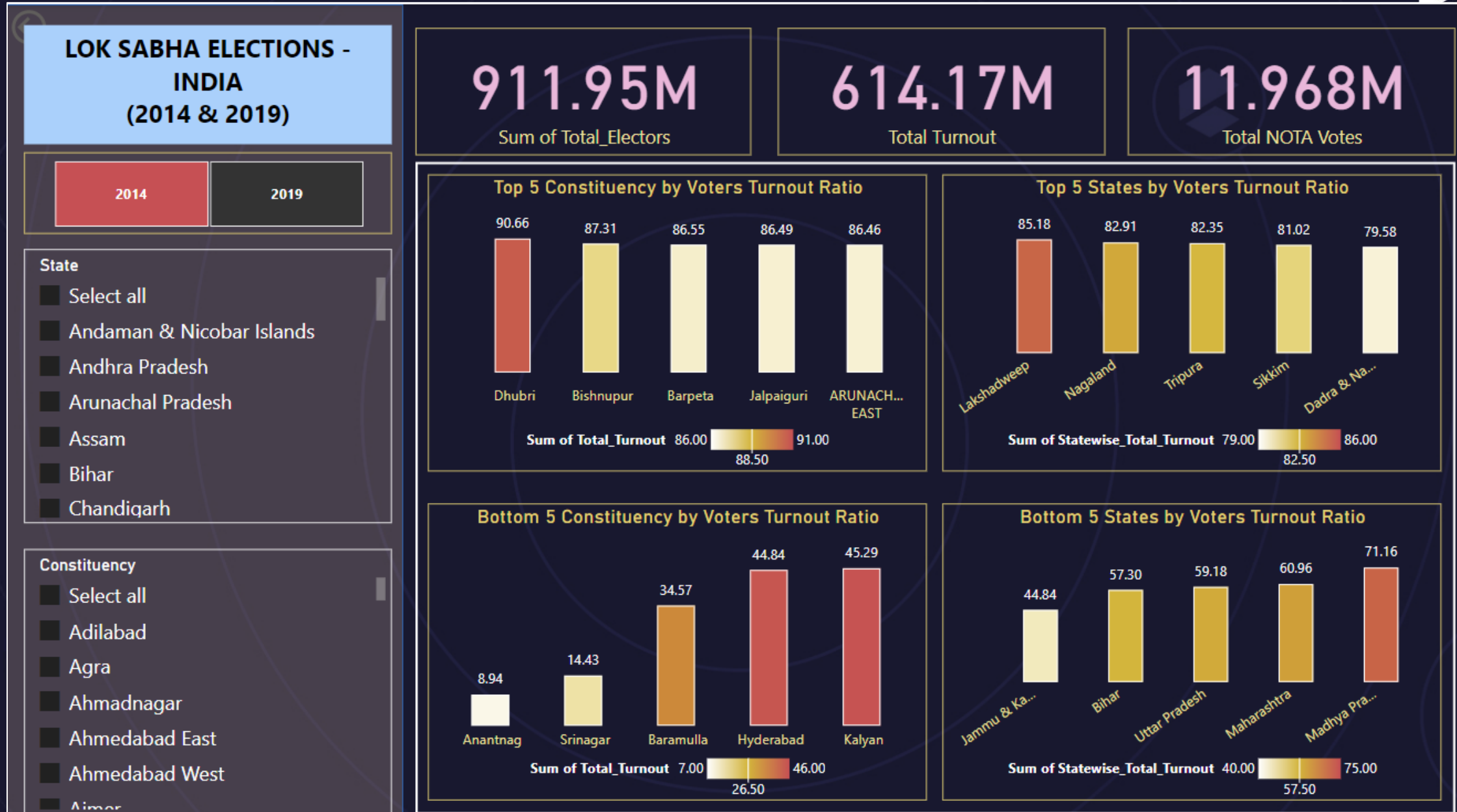


- Datasets of Lok Sabha elections 2014 and 2019 consists of 33 and 36 unique states. Data of Telangana, Chhattisgarh and Odisha states are missing from 2014 dataset. Although, the datasets were cleaned, but required some refining.
- Both Datasets have same number of columns but entries were slightly different. For example, General Category was mentioned as 'General' and 'GEN'.
- Similar, data cleaning was done for gender and constituencies. Also conversion of lowercase to uppercase for some data was done.



Data Cleaning

POWER BI (DASHBOARD 1)



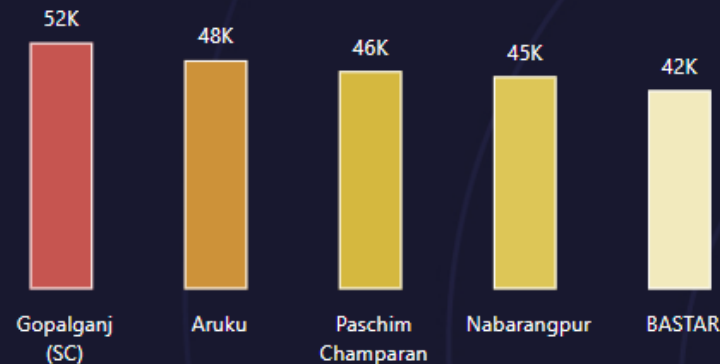
POWER BI (DASHBOARD 2)

LOK SABHA ELECTIONS - INDIA (2014 & 2019)

2014

2019

NOTA Votes by Constituency



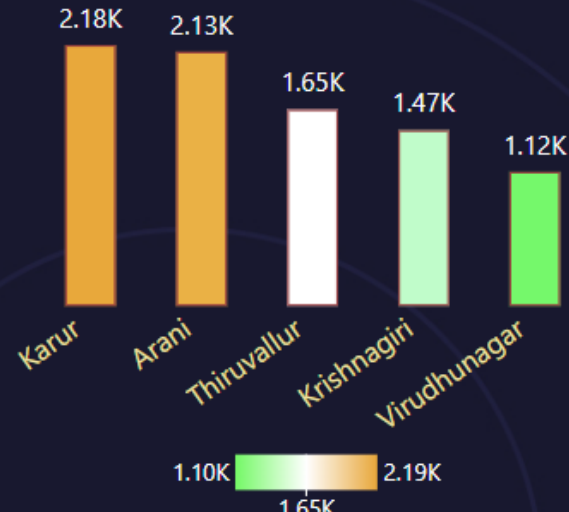
Sum of NOTA Votes 40K 46K 52K

Margin Difference with Runners up (LAKHS)



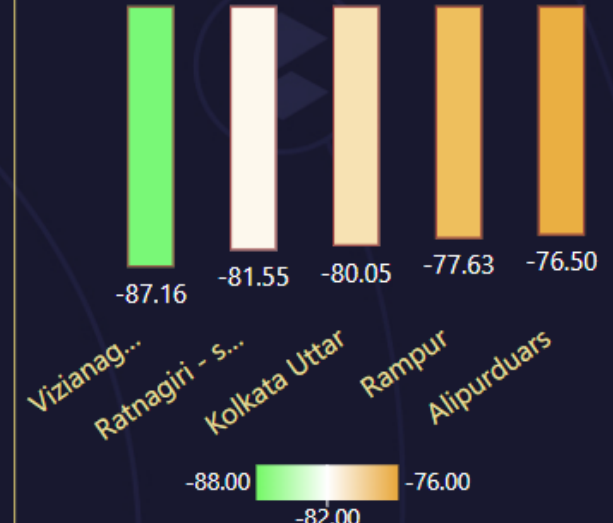
Sum of Margin 5.20 6.10 7.00

Constituencies INC Gain Vote Share (%)



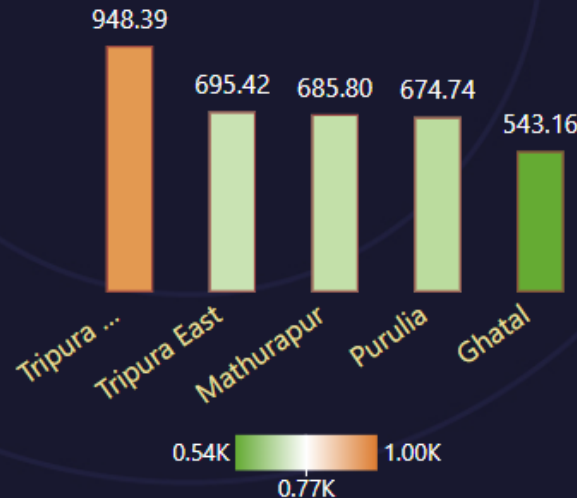
1.10K 1.65K 2.19K

Constituencies INC Lose Vote Share (%)



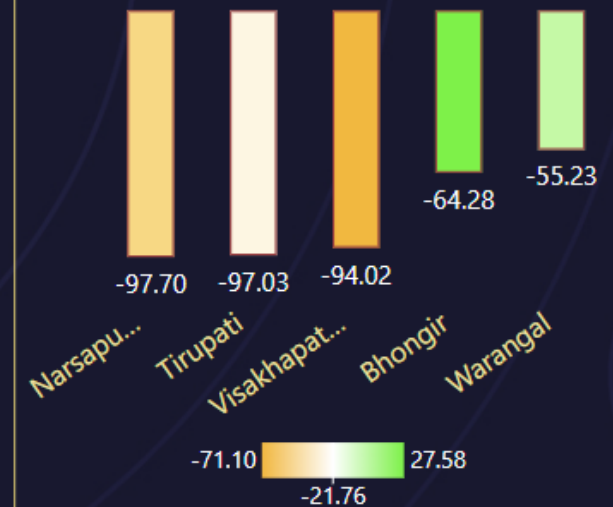
-88.00 -82.00 -76.00

Constituencies BJP Gain Vote Share (%)



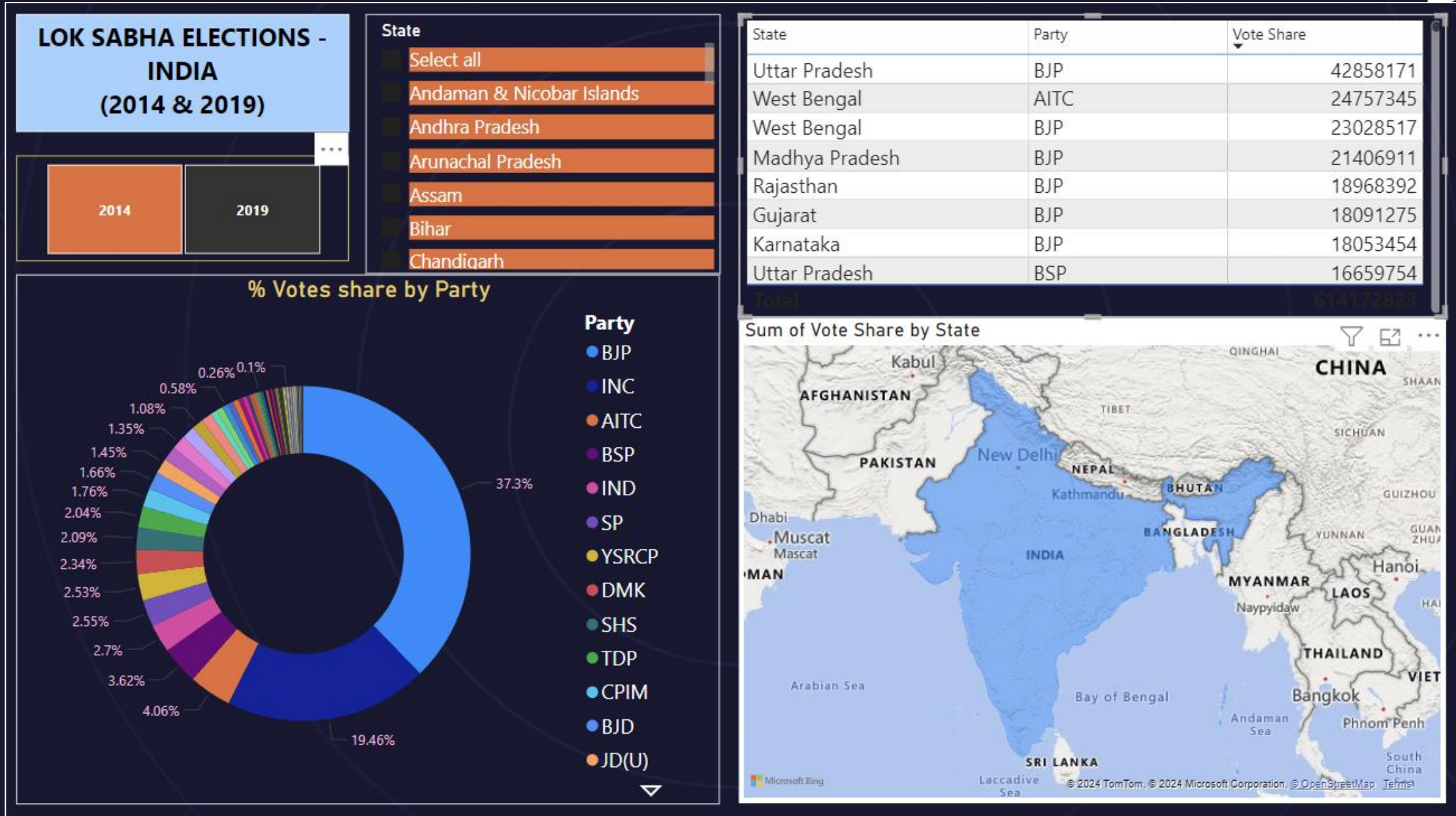
0.54K 0.77K 1.00K

Constituencies BJP Lose Vote Share (%)



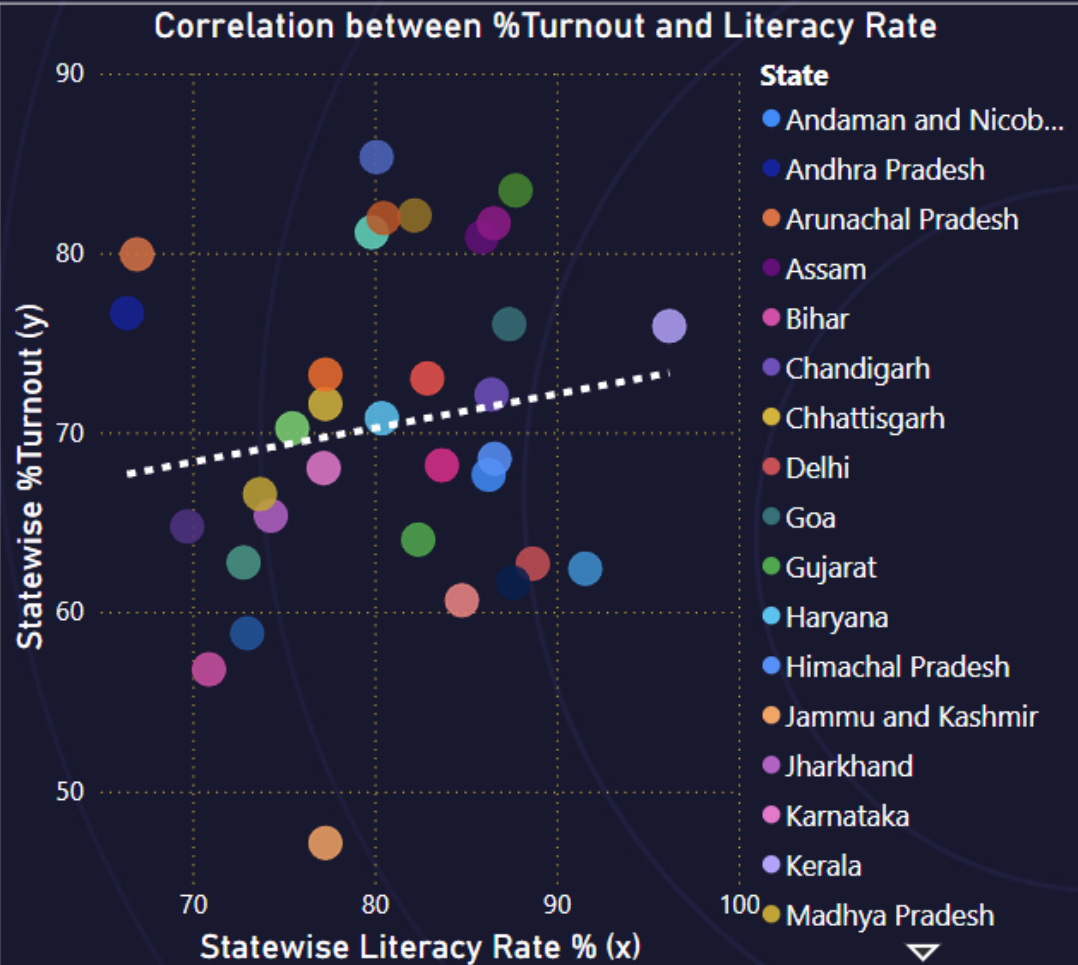
-71.10 -21.76 27.58

POWER BI (DASHBOARD 3)



POWER BI (DASHBOARD 4)

LOK SABHA ELECTIONS - INDIA (2014 & 2019)



Slope (m)

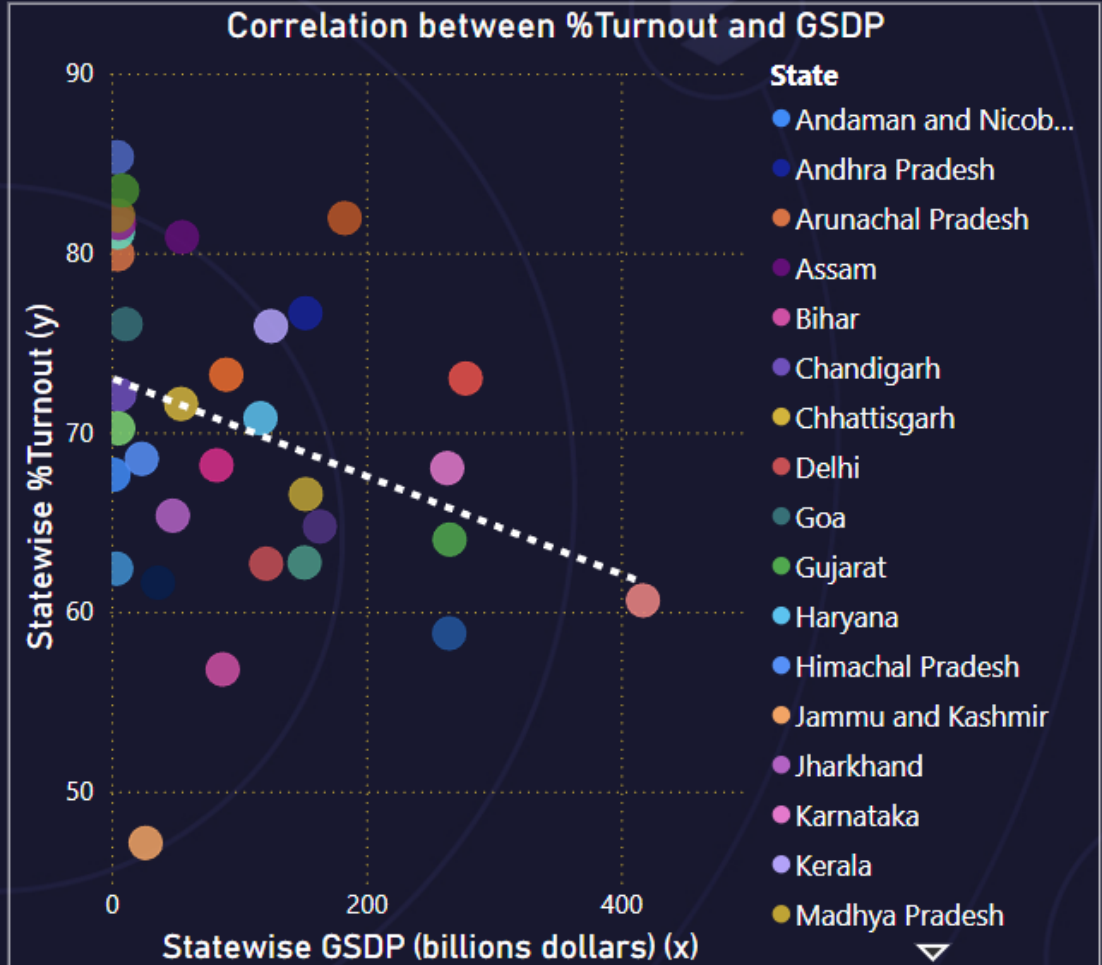
0.189

y-intercept

-0.006

Coefficient of Correlation

0.15



Slope (m)

-0.027

y-intercept

73.0262

Coefficient of Correlation

-0.32

POWER BI (DASHBOARD 5)

LOK SABHA ELECTIONS - INDIA (2014 & 2019)

2014

2019

State

- ☐ Select all
- ☐ Andaman & Nicobar Islands
- ☐ Andhra Pradesh
- ☐ Arunachal Pradesh
- ☐ Assam
- ☐ Bihar

Constituency

- ☐ Select all
- ☐ Adilabad
- ☐ Agra
- ☐ Ahmadnagar
- ☐ Ahmedabad East
- ☐ Ahmedabad West

911.95M

Total Electors

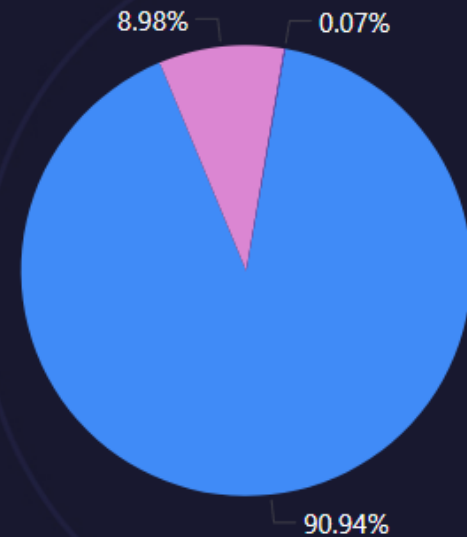
603.19M

Total Voters Turnout

8054

Total Candidates

Total Candidates Split by Gender



Gender ● MALE ● FEMALE ● OTHERS

7322

Male Candidates

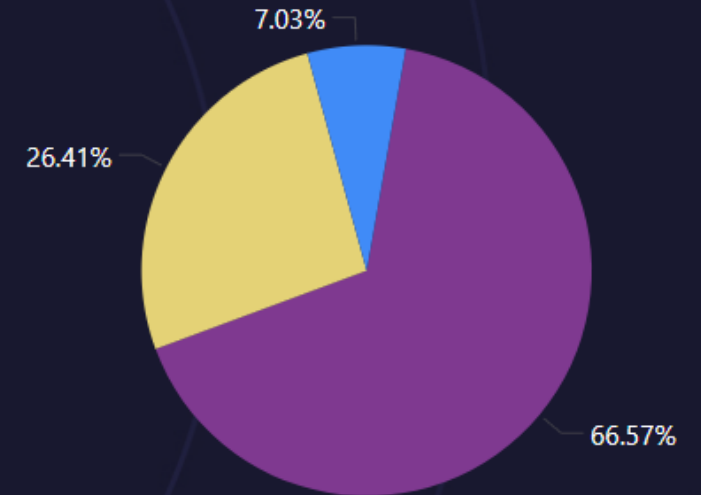
726

Female Candidates

6

OTHERS Candidates

Total Candidates Split by Category



Category ● GENERAL ● SC ● ST

5317

General Candidates

2110

SC Candidates

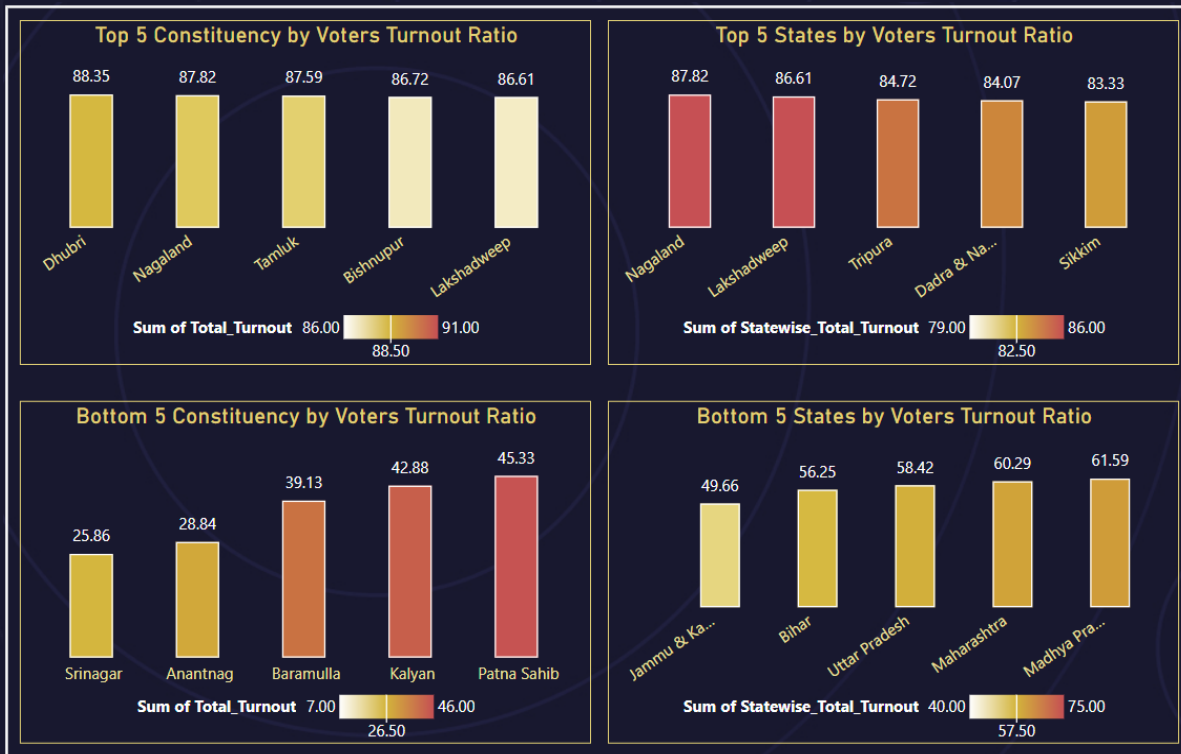
627

ST Candidates

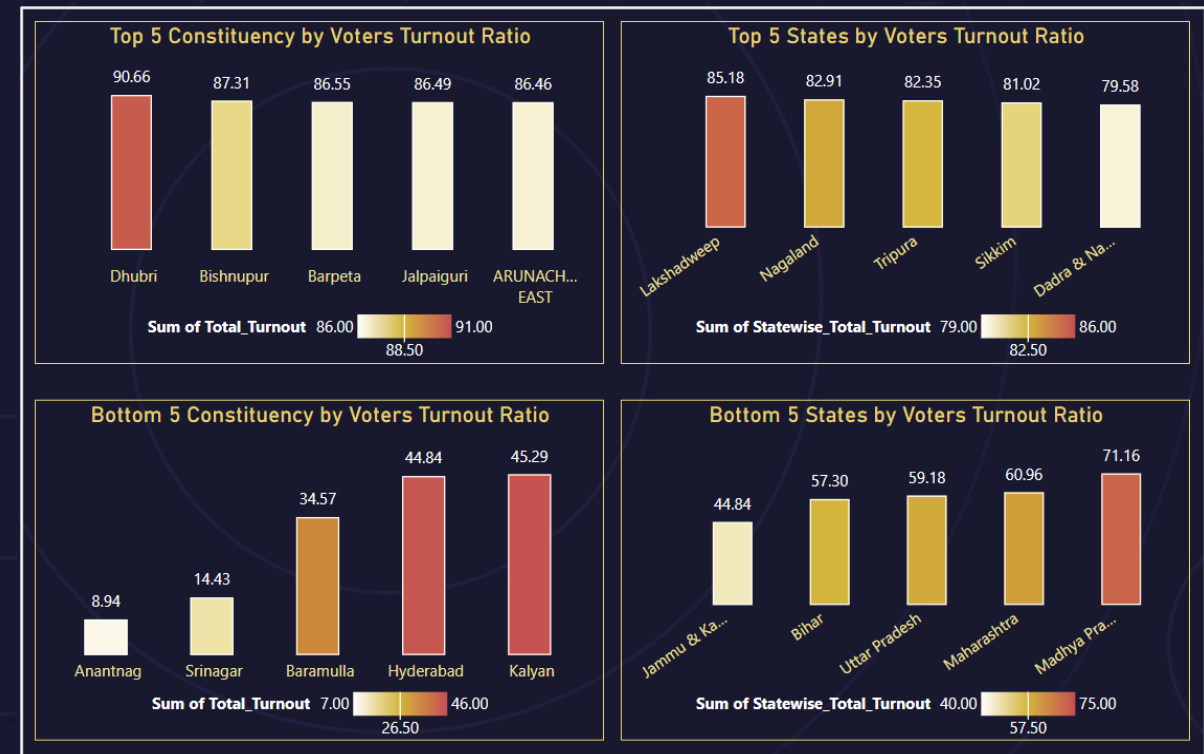
OBSERVATIONS (Voters' turnout ratio)



- In both the Lok Sabha Elections, Dhubri (Assam) reported the highest voters' turnout as per the constituency.
- Srinagar and Anantnag, which reported lowest voters' turnout as per constituency in 2014 and 2019 respectively, belongs to Jammu and Kashmir state.
- In both the Lok Sabha Elections, Jammu & Kashmir reported the lowest voters' turnout as per the state.



Year: 2014

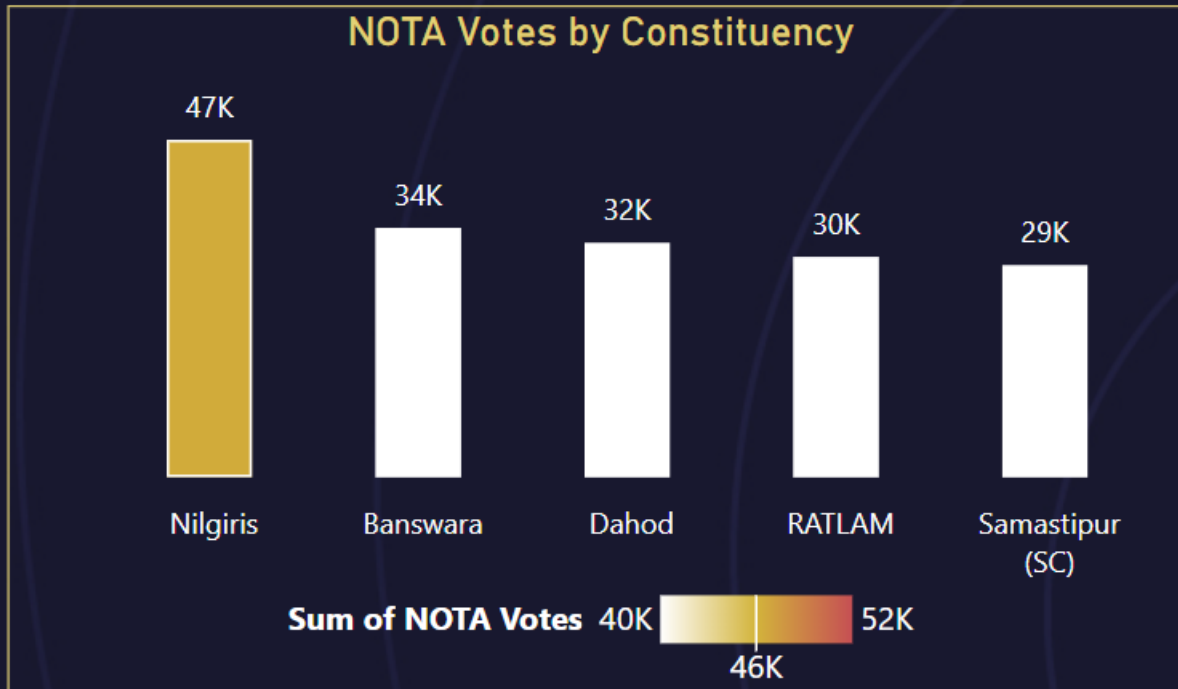


Year: 2019

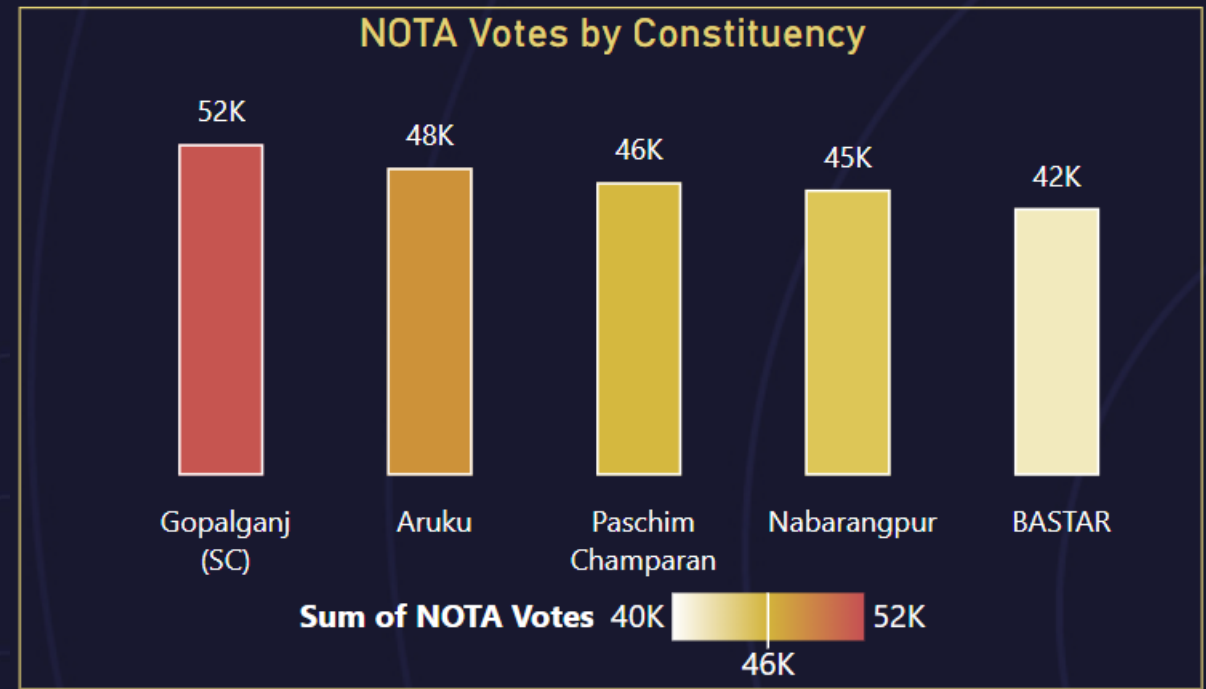
OBSERVATIONS (NOTA votes)



- Nilgiris (Tamil Nadu) reported the highest NOTA votes in year 2014 while Gopalganj (Bihar) reported highest NOTA votes in year 2019 Lok Sabha elections.
- It is clearly observed that there were more number of NOTA votes in 2019 than in 2014.
- NOTA option was first introduced in 2013 by ECI in state assembly elections.
- In 2014, most of the citizens were not aware of NOTA option and its importance.
- While in 2019 LS elections, more people casted their votes for NOTA.

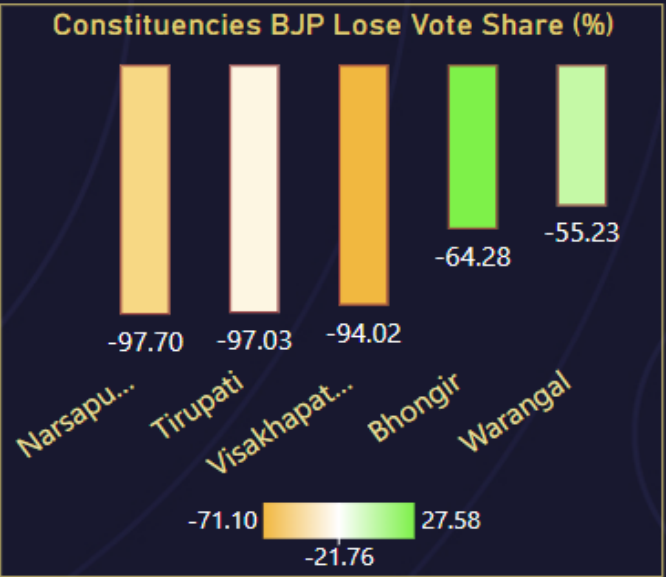
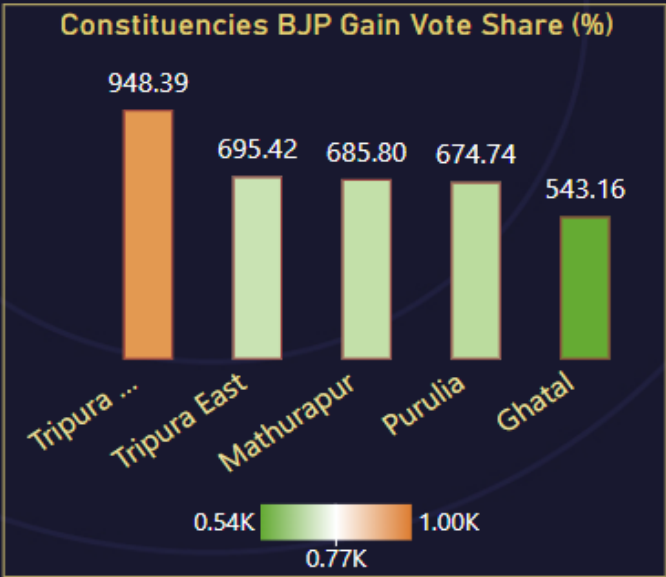
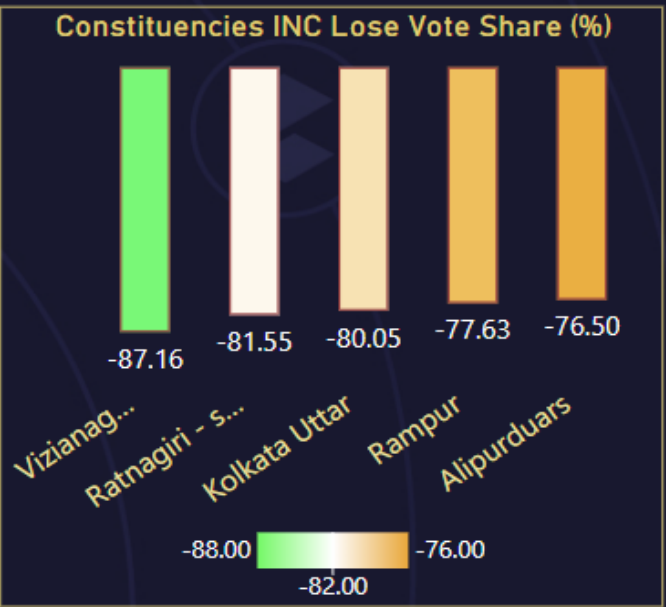
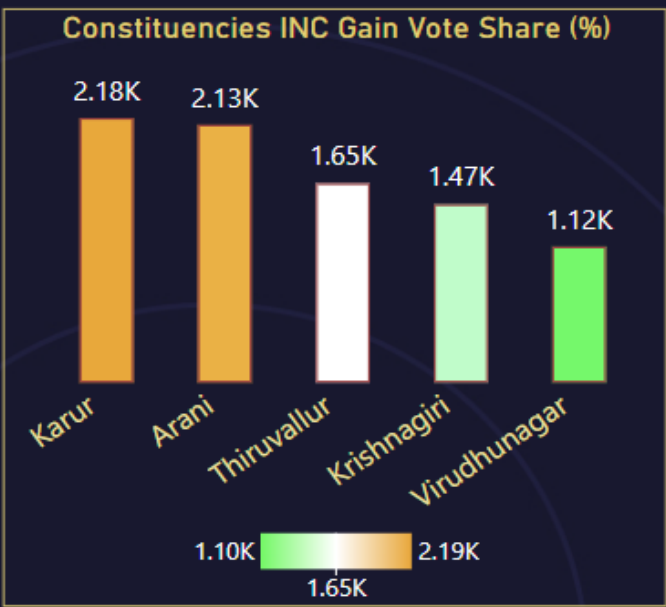


Year: 2014



Year: 2019

OBSERVATIONS (Performance of Top 2 National Parties)



INDIAN NATIONAL CONGRESS (INC)

- INC gain votes from constituencies located in the southern part of India especially Tamil Nadu.
- INC lose votes from constituencies located in West Bengal.



BHARTIYA JANTA PARTY (BJP)

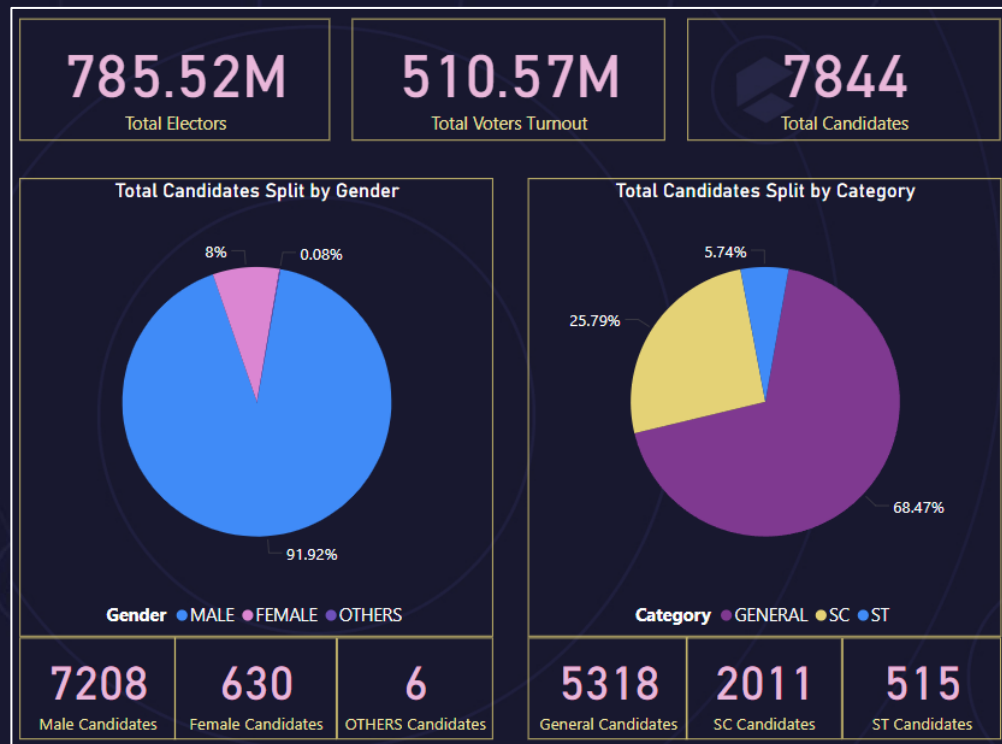
- BJP gained votes from constituencies located in North-Eastern and Eastern part of India especially Tripura and West Bengal.
- BJP lose votes from the constituencies located in Andhra Pradesh.



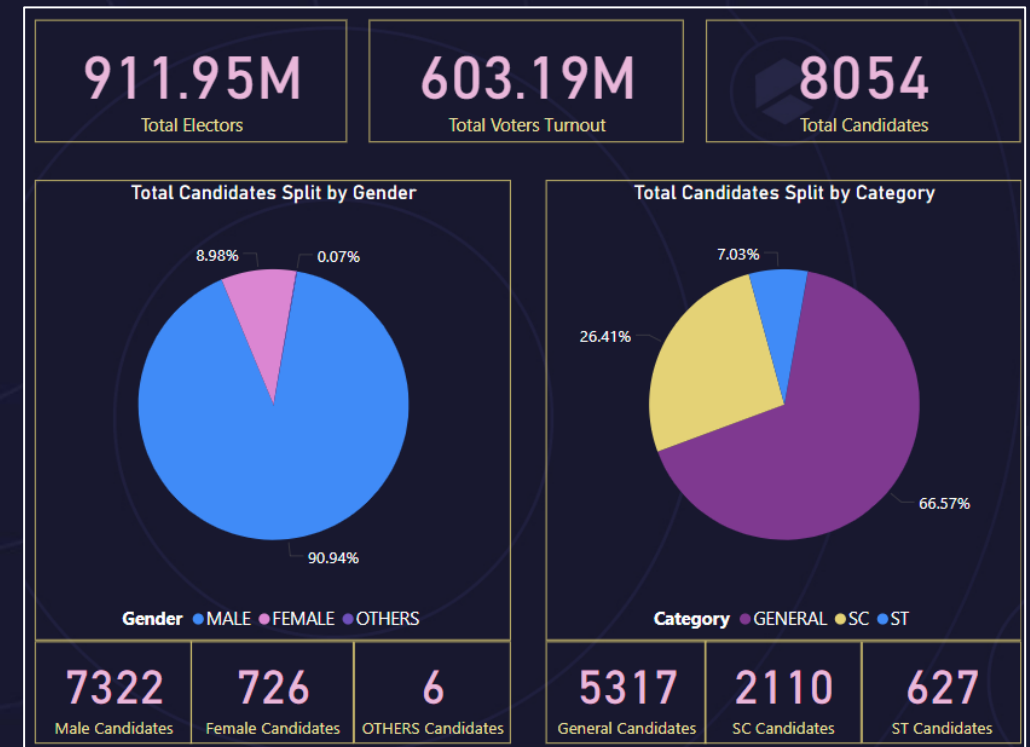
OBSERVATIONS



- It is observed that Total Electors has increased in 2019 as compared to 2014.
- Voters' Turnout in 2014 : 64.99%
- Voters' Turnout in 2019 : 66.22%
- The Gender ratio (Male to Female) of the candidates in 2014 was 11.44:1 while in 2019 reduced to 10.08:1.



Year: 2014



Year: 2019

Recommendations to increase Voters' Turnout



- Spread Voting Awareness among the citizens
- Targeted Campaigns for young voters', first-time voters, etc. shall be run specially on social media.
- Online platforms should promote and disseminate the information about the importance of voting.
- Voting process should be simplified and user-friendly.
- Polling booths shall be easily accessible.
- Reminders about the polling dates, timings, booths as per the constituencies should be send to the citizens via texts, calls, etc.
- Unrepresented communities should be informed and motivated to vote.
- Feedback mechanisms could be implemented to gather suggestions for improvements and feedback about the process and voting experience for future reference.



THANK YOU..

**SUGGESTIONS
ARE WELCOMED**