The Influence Industry
Digital Platforms, Technologies, and Data in the General Elections in India

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Background to Elections in India

Elections in India are complex, diverse, and has been described as one of the largest events in the world.[1] Elections are based on a system of federalism and officials are elected at the federal, state, and local levels and are determined by the 'first past the post' system.

The process to create a fair and impartial election is complex in the second most populous country in the world. India follows the universal adult franchise system of voting where every citizen above the age of 18 has the right to vote. The elections are administered by the Election Commission of India (EC) which was formed on 25th January, 1950 as an autonomous, constitutionally established federal authority. General elections, state legislature elections, election for President and Vice President of India are under the control and direction of EC. The role of EC is also extended to delimitation of constituencies, preparation of electoral rolls, recognition of political parties and allotment of party symbol. According to the Supreme Court, where existing laws and provisions are silent, the Election Commission has the authority to fill these gaps.[2] Politically, there are national parties, state parties and regional parties and the criteria for recognizing a party as such is laid down by the EC[3]. Currently, there are seven national parties in India[4].

Understanding the use of personal data in elections is the first step towards enabling individuals to choose how they want to engage in elections and important in formulating policy response towards the use of digital data and technology by political parties and candidates to ensure free and fair elections.

The recent controversy over the use of Facebook data by the analytics company Cambridge Analytica and the unclear role of its parent company in Indian politics dating as early as 2009 has highlighted the potential influence and opacity around the collection and use of personal data in elections across contexts including India.[5] The growing trend of digital and data driven elections as seen in India, in particular in the 2014 General Elections and the digital strategies for the 2019 elections, demonstrate the important role that data and technology now play in elections. These factors have all raised questions that this case study will attempt to explore including:

[1] Election Commission of India, Function (Reservation) (<http://eci.nic.in/eci_main1/the_function.aspx#reservation>)
[2] Ibid.
[3] Political Parties in India on Election.in <http://www.elections.in/political-parties-in-india/>)
[4] 'Trinamool Congress is now 7th 'national party' in India', (Economic Times, 03 September 2016) <https://economictimes.indiatimes.com/news/politics-and-nation/trinamool-congress-is-now-7th-national-party-in-india/articleshow/53982126.cms >
[5] 'Whistleblower claims Cambridge Analytica's partners in India worked on elections, raising privacy years', (The Washington Post, 08 March 2018) <https://www.washingtonpost.com/world/asia_pacific/whistleblower-claims-cambridge-analyticas-partners-in-india-worked-on-elections-raising-privacy-fears/2018/03/28/1168c04c-328a-11e8-b6bd-0084a1666987_story.html?utm_term=.da6b6164e8c8>

- What are the different types of companies, platforms, and techniques involved in the generation, collection, and use of data in elections with a focus on the 2014 and 2019 elections towards mapping the data ecosystem for elections? How do these differ from traditional electioneering techniques in India?

- What are the present regulations around use of digital platforms and data in Indian elections and are these adequate to address the emerging questions and concerns around the use of personal data in elections?

The case study will draw upon news items, academic articles, policy and legislation, company websites and promotional material, campaigning and election material such as advertisements and voter rolls to explore the above questions in the context of the 2014 and upcoming 2019 elections in India.

Techniques, Technology, Online Platforms and Data

In June 2014, there were reportedly 243 million internet users, 114.8 million facebook users, and 33 million twitter users in India.[6] It has been reported that the 2014 elections saw a turn out of 83.41 crore voters (66.4%)[7], cost approximately 714.28 crore[8], and relied on approximately 1.7 million electronic voting machines.[9]

Though other elections have leveraged digital platforms prior to 2014, the 2014 general elections in India marked a change in electioneering strategy and has been said to be different from previous electoral campaigns in India. Traditionally, candidates have relied on local and cultivated knowledge and have used techniques such as opinion polls, voter banks, door to door campaigning, booth wise caste and religious profiling, key community leaders, and volunteers to focus on groups of voters.[10] In contrast, in the 2014 elections, the use of data, technology, and digital platforms played a central role in the way the campaigns were designed, structured, targeted, implemented, and communicated. Technology and data were also key in strategically navigating the complexities of demographics, religion, politics, caste,

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[6]'Twitter and Polls: What Do 140 Characters Say About India General Elections 2014', (Twitter & Polls: Analyzing and estimating political orientation of Twitter users in India General Elections 2014, Abhishek Bhola, 06 June 2014) <https://www.slideshare.net/CERCatIIITD/twitter-and-polls-what-do-140-characters-say-about-india-general-elections-2014>

[7] Voter Turnout Highlights of Lok Sabha Election 2014, Election Commission of India <http://eci.nic.in/eci_main1/SVEEP/VoterTurnoutHighlightsLokSabha2014.pdf>

[8] 'It cost Narendra Modi $100 million to win the Indian election—here's how he spent it', (Quartz India, 16 January 2015) <https://qz.com/327771/it-cost-narendra-modi-100-million-to-win-the-indian-election-heres-how-he-spent-it/>

[9]'Indian Democracy Runs on Briefcase-Sized Voting Machines', (The Atlantic, 15 April 2015) <https://www.theatlantic.com/international/archive/2014/04/indian-democracy-runs-on-briefcase-sized-voting-machines/360554/>

[10]'Why India has nothing to fear from rightful use of big data', (Economic Times, 01 April, 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/why-india-has-nothing-to-fear-from-rightful-use-of-big-data/articleshow/63560703.cms>

geography, and community in India.[11]

Techniques

Though digital strategies were key to the 2014 elections in general, the BJP campaign has been recognized as actively and successfully leveraging data, technology, and online platforms to enable and calculate reach, scale, and impact of its campaign.[12] The Modi campaign was informed by the non-profit CAG and made up of several components such as a social media analytics division, an Information Technology Cell[13], and Mission 272+[14] that leveraged data to inform campaign messages, methods, and focus. Examples of strategy that leveraged technology from the BJP campaign include:

- **'Chai pe Charcha':** A programme for public outreach and communication that leveraged satellite, DTH, and internet and mobile technology to facilitate 'conversations over tea' with individuals within and outside of India. The themes of Chai pe Charcha were Good Governance, Women Security, and Agrarian Crisis.[15]
- **3D Hologram Rallies:** 3D hologram technology was used to hold 1,350 3D rallies across India at the state and constituency level.[16]
- **Modi Aane Wala Hai:** GPS enabled video trucks went to villages in Uttar Pradesh to ensure outreach in remote areas.[17]
- **NaMo number**: The NaMo number was a strategy to gain more supporters through gamification where individuals are incentivized to collect contacts which are represented by a voter ID and phone number.[18]
- **Mere Sapno Ka Bharat:** Citizens were given the opportunity to record short videos on their vision for India. Individuals could submit through email, SMS, WhatsApp, or voice message. Chosen videos would be published on the India272 campaign portal.[19]

[11] 'Hyderabad's Analytics Start-up Modak Analytics Builds India's Largest ever Big Data Repository of Electoral Data', (Business Wire, 14 May 2014)
<https://www.indiainfoline.com/article/news-business-wire-finance/hyderabad%E2%80%99s-analytics-start-up-modak-analytics-builds-india%E2%80%99s-largest-ever-big-data-repository-of-electoral-data-114072300636_1.html>
[12] 'Social Media and the 16th Lok Sabha Elections', (Saadia Gardezi, IDG Connect, 08 October, 2014)
<http://www.idgconnect.com/abstract/8915/social-media-16th-lok-sabha-elections>
[13] 'How India's BJP used data analytics to swing voters', (PR Week, 17 September, 2014)
<https://www.prweek.com/article/1312443/indias-bjp-used-data-analytics-swing-voters>
[14] 'Celebrating India's Regional Diversity through the Campaign', (Narendra Modi, 16 May 2014)
<https://www.narendramodi.in/celebrating-indias-regional-diversity-through-the-campaign-3148>
[15] Indian Political Action Committee (I-PAC), Indian General Elections
<https://www.indianpac.com/our-work/indian-general-elections>
[16] 'After 3D Modi's Hi Tech campaign will make his presence felt at 26 places' (Tv9 Gujarat, 29 November, 2012)
<https://www.youtube.com/watch?v=jfIOqYxvmQE and https://www.indianpac.com/our-work/indian-general-elections>
[17] Indian Political Action Committee (I-PAC), Indian General Elections
<https://www.indianpac.com/our-work/indian-general-elections>
[18] 'How Modi built an army of supporters and won the Indian elections', (Call Hub, 11 August 2016)
<https://callhub.io/modi-built-army-supporters-won-indian-elections/>
[19] 'NaMo's 'Mere Sapno Ka Bharat' Campaign Evokes Massive Response' (The Pioneer, 14 February 2014)
https://www.dailypioneer.com/state-editions/raipur/namos-mere-sapno-ka-bharat-campaign-evokes-massive-response.html

- **Bharat Vijay Rallies:** The rallies leveraged social media to ensure outreach and engagement prior to the event and electoral data and on the ground reports to inform each rally speech with local context.[20]
- **Vijay Sankalp Diwas:** Leveraged technology to engage with booth level workers for the BJP across the country.[21]
- **Modi for PM Fund:** Placed ads on Facebook and on the Modi website for monetary contributions.[22]
- **The Indian Republic:** An online news portal that sought to engage with the public via internet and mobile platforms.[23]

While BJP has been seen as taking the lead in using technology for political purposes, Congress was reportedly seen as a late entrant[24] with other national political parties yet to construct a significant digital strategy.

Technology

The 2014 elections leveraged technology (satellite, DTH, internet and mobile) and data to create 'digital' encounters and interaction across sectors of society in such a way, at such a scale, and in real time that previously had not been done. Analysis of data from a variety of sources allowed for these interactions to be targeted to the individual, community, demographic, and geography. Analytics also enabled candidates to develop clear pictures of voter stance - pro, undecided, against[25] or unreached.[26] With this information, parties could subsequently form their personal brands based on the reaction of users, micro-target their messages, and selectively choose their medium of communication and technology.[27] For example, the BJP targeted mobile voters through voice broadcasting,[28] used GPS in campaign vans to increase efficiency,[29] and used cookies on their website to allow them to harvest and

[20] Indian Political Action Committee (I-PAC), Indian General Elections
<https://www.indianpac.com/our-work/indian-general-elections>
[21] Indian Political Action Committee (I-PAC), Indian General Elections
<https://www.indianpac.com/our-work/indian-general-elections>
[22] Indian Political Action Committee (I-PAC), Indian General Elections
<https://www.indianpac.com/our-work/indian-general-elections>
[23] Indian Political Action Committee (I-PAC), Indian General Elections
<https://www.indianpac.com/our-work/indian-general-elections>
[24] 'Battle for 2014: Tech-savvy BJP vs tardy Congress', (07 August, 2013)
<http://www.rediff.com/news/report/battle-for-2014-tech-savvy-bjp-vs-tardy-congress/20130807.htm>
[25] 'Changing face of Political campaigning strategies in India', (Call Hub, 09 August, 2016)
<https://callhub.io/changing-face-political-campaigning-strategies-india/>
[26] For example, the company Modak Analytics found that a large number of young voters between 18 – 35 were missing from the electoral list across India; ('Number crunchers during this election season', Deccan Chronicle, 10 January 2016)
<https://www.deccanchronicle.com/140524/nation-current-affairs/article/number-crunchers-election-season>
[27] 'How Indian politicians are using social media to build personal brands', (Chaitanya Ramalingegowda, YourStory, 08 September 2014) <https://yourstory.com/2014/09/politicians-social-media/>
[28] 'Changing face of Political campaigning strategies in India', (Call Hub, 09 August, 2016)
<https://callhub.io/changing-face-political-campaigning-strategies-india/>
[29] 'Why India has nothing to fear from rightful use of big data', (Economic Times, 01 April, 2018)

further use information about user's internet activity towards customized advertisements.[30] Data and technology also allowed for monitoring of campaign performance and election tracking as well as monitoring polling booths with real time voting data.[31] Importantly, these practices represent a departure from previous strategy and techniques such as reliance on ideology and manifestos.[32] Also used in the campaign were technologies offered by companies like Voxsta, a speech recognition startup that has been called "the political Siri". The BJP started leveraging Voxta[33] to provide its followers and potential voters with a service where anyone can call a number to listen to Modi's speeches and messages on specific issues.

Online Platforms

Online platforms played an important role in the 2014 elections and will continue to do so in the 2019 elections.[34] As the 2014 elections relied on social media and mobile, news items predict that the 2019 elections will continue to rely on social media, with an emphasis on video content as a key mechanism to reach first time voters – this in part will be enabled through access to cheap smartphones and 4G in urban and rural areas in India.[35] According to news reports, during the elections, Modi had 3.67 million followers on Twitter, 12 million likes on Facebook and the party's 68 million page views on Google Plus.[36] Online platforms acted as interactive virtual public spaces for candidates and the public to meet. They also acted as a source of news on elections, tracked elections, and encouraged the public to engage in elections. In doing so, online platforms took on functions that typically would be carried out by separate companies - polling agencies, media outlets etc. Thus, both the engagement and the data generated on these platforms became critical to the election. As an illustration of the role of online platforms, reports have found that the number of tweets rose 600% from the 2009 elections to the 2014 elections.[37] Importantly, data generated on social media platforms

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<https://economictimes.indiatimes.com/news/politics-and-nation/why-india-has-nothing-to-fear-from-rightful-use-of-big-data/articleshow/63560703.cms>

[30]'THE FIRST PRIME MINISTER TO USE BIG DATA', (Dataconomy, 23 May 2014) <http://dataconomy.com/2014/05/narendra-modi-first-prime-minister-use-big-data-analytics/>

[31]'Why India has nothing to fear from rightful use of big data', (Economic Times, 01 April, 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/why-india-has-nothing-to-fear-from-rightful-use-of-big-data/articleshow/63560703.cms> s

[32]'Changing face of Political campaigning strategies in India', (Call Hub, 09 August, 2016) <https://callhub.io/changing-face-political-campaigning-strategies-india/>

[33]'Narendra Modi, now on the other end of your phone', (Mint, 09 April 2014) <https://www.livemint.com/Politics/hLMdmNFovCNNIuLjlnKtWK/Narendra-Modi-now-on-the-other-end-of-your-phone.html>

[34]'Rahul Gandhi Banking On Big Data Analytics To Counter BJP In 2019 Lok Sabha Elections', (Analytics India Magazine, June 2018) <https://analyticsindiamag.com/congress-big-data-analytics-bjp-2019-lok-sabha-elections/>

[35]'How the new age voters will be crucial in deciding the political fortunes in 2019', (Economic Times, 18 March 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/why-political-parties-cant-ignore-these-10-cr-voters-in-their-quest-for-2019/articleshow/63347913.cms?from=mdr>

[36]'How big data has changed India elections', (CNBC, 10 April 2014) <https://www.cnbc.com/2014/04/10/how-big-data-have-changed-india-elections.html>

[37]'Twitter and Polls: What Do 140 Characters Say About India General Elections 2014', (Twitter & Polls: Analyzing and

provided candidates unprecedented and new insights into voter behavior, demographics, opinions, interests. Twitter and other social media platforms also sparked a series of research by the academic community using this data.[38] The personalized nature of social media platforms worked to ensure that targeted messaging and advertising translated into cemented opinions and ideas.[39]

Twitter

Twitter served as a key platform and channel of communication and interaction between parties and candidates and the public during the 2014 elections. Importantly, the platform allowed not only Indian's, but NRI's and interested individuals around the world to have a voice and weigh in on the elections.[40] In news reports, Twitter representatives have held that "best practices from Indian elections are already being implemented by media outlets, political parties, and candidates countries around the world."[41] During the 2014 elections, Twitter featured a Discover Page for Indian Politicians that included real time tweets, trending politicians sorted by the number of followers, location, network analysis, what's trending, sentiment. Individuals were able to click on the politician and be taken to the profile of the candidate. Twitter also collaborated with media outlets like Hindustan Times, Times Now, and Times of India to drive two way conversations during election programmes.[42] Twitter also released the '100 days of Twitter diplomacy by Narendra Modi' blog,[43] and enabled 'auto-tweets' – so every time a user mentioned BJP – an auto-tweet would be sent in response.[44]

Google: During the 2014 elections, Google offered the Know Your Candidate Tool. The

estimating political orientation of Twitter users in India General Elections 2014, Abhishek Bhola, 06 June 2014) <https://www.slideshare.net/CERCatIIITD/twitter-and-polls-what-do-140-characters-say-about-india-general-elections-2014>

[38]'Twitter and Polls: What Do 140 Characters Say About India General Elections 2014', (Twitter & Polls: Analyzing and estimating political orientation of Twitter users in India General Elections 2014, Abhishek Bhola, 06 June 2014) <https://www.slideshare.net/CERCatIIITD/twitter-and-polls-what-do-140-characters-say-about-india-general-elections-2014>

[39]'Politics & Analytics: The election that confounded everybody', (Douglas A. Samuelson, ORMS Today, December-Volume 43, Number 6) <https://www.informs.org/ORMS-Today/Public-Articles/December-Volume-43-Number-6/Politics-Analytics-The-election-that-confounded-everybody>

[40]'Elections 2014: The winners and losers in the Twitter battle', (Mint, 15 May 2014) <https://www.livemint.com/Home-Page/DaThoUqAUV74ihWNuZ3J0J/Elections-2014-on-Twitter.html>

[41]'Modi played a key role in expansion of Twitter in India', (The Hindu, 23 May 2016) <http://www.thehindu.com/news/national/modi-played-a-key-role-in-expansion-of-twitter-in-india/article6107402.ece>

[42]'Elections 2014: Google's Know Your Candidate Tool, Twitter's Discover Page For Indian Politicians & Round Two Of Facebook Live Talks', (Lighthouse Insights, 09 April 2014) <http://lighthouseinsights.in/elections-2014-googles-know-your-candidate-tool-twitters-discover-page-for-indian-politicians-round-two-of-facebook-live-talks.html/>

[43]'#NaMo100days sets new standard for Indian diplomacy on Twitter', (Raheel Khursheed, 4 September 2018) <https://blog.twitter.com/official/en_in/a/2014/namo100days-sets-new-standard-for-indian-diplomacy-on-twitter.html>

[44]'India's next ruling party is also one of the world's worst Twitter spammers', (Vox, 16 April 2014) <https://www.vox.com/2014/4/16/5621934/bjp-sucks-at-twitter>

interactive feature gets you details of the politicians who are standing up for this election. Either you can zoom and locate your city or you can key in the pincode to find your politician. Google also offered Elections Hub, Pledge to Vote visual, and Google Score based on the amount of search activity people are performing in the last 24 hours using Google Search and YouTube for a political leader. Google Score also takes into consideration the amount of engagement the political leader is drawing on Google Plus.[45]

Facebook: During the 2014 elections, Facebook offered a number of solutions for example Election Tracker - a performance dashboard based on the number of mentions on Facebook of political parties. Facebook also offered the "Candidates on Facebook Talks Live" which was a tie up with NDTV and Newslaundry. The feature provided individuals the chance to discuss the electoral agenda with the country's top politicians. Season 2 of its Facebook Talks has been described as a digital town hall where all people can share their views and questions, and post video entries.[46]

- Instagram: Instagram served as a platform for pictures of elections, events, campaigning, and rallies to be shared. For example, 'I'm a Voter Button' was a feature for mobile users in India which allowed people to post their voting stories on their Facebook timeline on the polling days of their respective constituencies.
- WhatsApp: Youth leaders have been reported as using WhatsApp to reachout to and coordinate with voters to guide and ensure their votes. The platform has been noted as key in communicating both ordinary and fake campaign messages - with news items quoting the B.JP and Congress establishing at least 50,000 WhatsApp groups.[47] The authenticity of content on the platform has been a huge concern. For example, in 2014, a fake pre-election poll result was circulated supposedly sponsored by the BBC predicting a win for the BJP in Karnataka state where it was in minority. Rumors also pointed to a similar face poll being sponsored by the United States Embassy in New Delhi.[48] Demonstrating the importance of the platform Ankit Lal, strategist for the Aam Aadmi Party has been quoted in the New York Times saying "we wrestle on Twitter. The battle is on Facebook. The war is on WhatsApp."[49] WhatsApp has also announced that it will launch Verificado in the India ahead of the 2019 elections after receiving a warning

[45]'How Facebook, Google, Twitter Are Making A Difference In 16th Lok Sabha Elections 2014', (Lighthouse Insights, 28 March, 2018)
<http://lighthouseinsights.in/how-facebook-google-twitter-are-making-a-difference-in-16th-lok-sabha-elections-2014.html/>
[46]'Elections 2014: Google's Know Your Candidate Tool, Twitter's Discover Page For Indian Politicians & Round Two Of Facebook Live Talks', (Lighthouse Insights, 09 April 2014)
<http://lighthouseinsights.in/elections-2014-googles-know-your-candidate-tool-twitters-discover-page-for-indian-politicians-round-two-of-facebook-live-talks.html/>
[47]'In India, Facebook's WhatsApp Plays Central Role in Elections', (New York Times, 14 May 2018)
<https://www.nytimes.com/2018/05/14/technology/whatsapp-india-elections.html>
[48]'In India, Facebook's WhatsApp Plays Central Role in Elections', (New York Times, 14 May 2018)
<https://www.nytimes.com/2018/05/14/technology/whatsapp-india-elections.html>
[49]'In India, Facebook's WhatsApp Plays Central Role in Elections', (New York Times, 14 May 2018)
<https://www.nytimes.com/2018/05/14/technology/whatsapp-india-elections.html>

from the government inlight of a mob-lynching that took place in Maharashtra instigated by fake news spread on the platform.[50] After the Cambridge Analytica scandal and leading up to the 2019 elections, Facebook has committed to hire "thousands of more people' to identify fake pages and content.[51]

Data

Data has always been a part of the election process.[52] From candidates tuning their messages according to the demographics and the perceived needs of the electorate - this information garnered through a trusted network of volunteers and paid "influencers" and organisers, to candidates targeting the electorate based on the caste, religion or such perceived fault lines, data has played a role in segmenting, sorting, and differentiating the electorate.[53]

The use of data in elections comes with its own unique challenges. Data in India is reflective of the diverse, large, fluid, and dynamic society that India is. In contrast to contexts that have standardized, cleaned, and a significant amount of digitized data in the country, this is still an endeavor that is in process in India. Vast amounts of data remain un-digitized. Even if data is digitized, it may not be in a usable format. Tools that have been noted as useful in working with data in the Indian context include optical character recognition, web scraping, PDF conversion, parsing, GIS mapping, and fuzzy name matching.[54]

The importance of data in the 2014 elections also meant that companies were faced with the challenge of overcoming many of the nuances and particularities of data in India. Challenges in government data include the fact that it is often kept by single offices at the state or district level, and data is only partially digitized.[55] For example, the company Modak Analytics has noted that voter rolls are in PDF format in 12 languages.[56] Companies have noted that though companies like Cambridge Analytica can create psychographic profiles of individuals based on facebook quizzes and analysis of other social media content, in India, manual data collection is

[50]'WhatsApp to bring fake news verification model Verificado in India', (Entrackr, 20 July 2018) <https://entrackr.com/2018/07/whatsapp-fake-news-verification-model-verificado-in-india/>
[51]'Facebook will go on a hiring spree to get India's 2019 elections right', (Quartz India, 10 April 2018) <https://qz.com/1248162/facebook-will-go-on-a-hiring-spree-to-get-indias-2019-elections-right/>
[52]'India's political parties have mined voters' psychographic data for years', (Quartz India, 10 April 2018) <https://qz.com/1247197/cambridge-analytica-indias-bjp-and-congress-mined-voters-psychographic-data/>
[53]'Mutts, Dalits and Muslims: How Congress and BJP are wooing voters in Karnataka', (Times of India, 12 April 2018) <https://timesofindia.indiatimes.com/india/the-caste-factor-in-karnataka-why-rahul-gandhi-and-amit-shah-are-mutt-hopping/articleshow/63725848.cms>
[54]Studying Indian politics with large-scale data: Indian Election data 1961–today [Jensenius, Francesca R. and Gilles Verniers (2017). Studies in Indian Politics, 5(2), 269–279] <http://www.francesca.no/wp-content/2017/11/Jensenius_Verniers_SIP2017.pdf>
[55]Studying Indian politics with large-scale data: Indian Election data 1961–today [Jensenius, Francesca R. and Gilles Verniers (2017). Studies in Indian Politics, 5(2), 269–279] <http://www.francesca.no/wp-content/2017/11/Jensenius_Verniers_SIP2017.pdf>
[56]'Hyderabad's Analytics Start-up Modak Analytics Builds India's Largest ever Big Data Repository of Electoral Data', (Business Wire, 14 May 2014) <https://www.indiainfoline.com/article/news-business-wire-finance/hyderabad%E2%80%99s-analytics-start-up-modak-analytics-builds-india%E2%80%99s-largest-ever-big-data-repository-of-electoral-data-114072300636_1.html>

still a more reliant way of collecting information as there are a number of contextual factors (language, phonics, spelling) that humans can decipher and navigate that analytic has yet to overcome. For example, it was found that the name 'Srinivas' is pronounced in 430 different ways and the region Najafgarh is spelled differently in different databases.[57] A blog with some numbers around the engagement of the political parties online can be found on Social Samosa [58].

Though reports have indicated some sources of data used by companies and by the campaigns in 2014, the exact sources of data used are still unclear. For example, sources that have been cited include: open data sets, data from the Election Commission Website[59] , data from Government websites,[60] commissioned data were used during the election, manual collection of data, reliance on historic electoral records, accessing data from data brokers, and collecting data from social media platforms all appear to be forms and sources of data. During the 2014 elections, Modak Analytics built an Electoral Data Repository consisting of 81.4 crores voters. This was compiled from parliamentary and assembly constituencies, polling booths, and voter rolls. News items have cited the use and cross analysis of electoral and party records, caste affiliation at booth level, and political affiliation by caste membership, surveys on factors that mattered most, social media .[61] Personal data has also reportedly been collected through apps, social media, and missed calls.[62] Traditional electoral data can now also be combined and merged with other types of data for new insights such as census data, GIS data, and other sources of demographic and socio-economic data.[63]

There are also companies that collect and share election related data. For example:

Datanet India - Datanet India is a domestic company providing secondary level socio-economic and political statistical information about India, its states, regions, districts, and electioneering. The company has developed the site www.electionsinindia.com which provides access to election results in India, GIS based analysis of demographic and electoral attributes (village, town, and polling station), and analysis of the results of Parliamentary and Assembly

[57]'India's 'big data' election: 45,000 calls a day as pollsters target age, caste and religion', (The Guardian, 16 February 2017) <https://www.theguardian.com/world/2017/feb/16/india-big-data-election-pollsters-target-age-caste-religion-uttar-pradesh>

[58]'Social Media Strategy Review: Indian National Congress (INC)', (Social Samosa, 17 April 2017) <https://www.socialsamosa.com/2014/04/social-media-strategy-review-indian-national-congress/>

[59]Links to state-wise PDF electoral rolls, Election Commission of India <http://eci.nic.in/eci_main1/Linkto_erollpdf.aspx>

[60]'Rajesh Jain: Plan To Connect Voter ID With Mobile Number For Microtargeting Of Political Campaigns', (Medianama, 19 December 2013) <https://www.medianama.com/2013/12/223-rajesh-jain-netcore-politics-bjp/>

[61]'Cambridge Analytica's parent firm proposed a massive political machine for India's 2014 elections', (Quartz, 29 March 2018) <https://qz.com/1239561/cambridge-analyticas-parent-firm-proposed-a-massive-political-machine-for-indias-2014-elections>

[62]'Why India has nothing to fear from rightful use of big data', (Economic Times, 01 April, 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/why-india-has-nothing-to-fear-from-rightful-use-of-big-data/articleshow/63560703.cms>

[63]Studying Indian politics with large-scale data: Indian Election data 1961–today [Jensenius, Francesca R. and Gilles Verniers (2017). Studies in Indian Politics, 5(2), 269–279]

elections of the country.[64]

IDFC Institute - The IDFC institute has created a publically available interactive database for disaggregated Parliamentary, State, Municipal and Panchayat election result that also contains data on demographics, luminosity, financial inclusion etc.[65]

Apriori - Apriori is a domestic company that compiles data from final or draft electoral rolls and combined and standardized with data from Indian Post. According to the company, the data is aggregated over many years and enables the tracking of citizens over time.[66]

IndiaVotes - IndiaVotes is a domestic company that serves as a election resource covering election data on the Lok Sabha elections since 1952 and the State elections since 1977. It aims to become an open source equivalent to Wikipedia for election information in India. The company uses and analyses data from the public domain and provides summary reports and elections maps.[67]

The Trivedi Centre for Political Data makes available state assembly and general election data and offers the Lok Sabha interface tool for analysing and visualizing the data. [68] Data has also been compiled by individuals and posted on platforms like Github,[69] and some election data is made available by the government as open data through data.gov.in.[70] Companies like Microsoft[71] have also gotten into the fray of analysing and visualizing the data for public consumption through their Election Analytics Centre while partnering with Gramener and Network 18.

Companies

Though political parties have internal IT and analytics divisions and strategists, private companies are increasingly playing important roles in election. Yet, it is not entirely clear the role of the companies which were involved in the 2014 election and which of these companies

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[64]Datanet India: Empowering India-centric Socio-economic and Electoral data <https://datanetindia.com/>

[65]Electoral Data- Related Publications, IDFC Institute
<http://www.idfcinstitute.org/projects/state-capacity/electoral-data/#project-related-publications>

[66]Apriori Data <https://www.aprioridata.com/india-data#enhance>

[67] IndiaVotes: India's largest election database <www.indiavotes.com>

[68] Trivedi Centre for Political Data <https://tcpd.ashoka.edu.in/>

[69] Github <https://github.com/raphael-susewind/india-religion-politics/blob/master/ROADMAP.md>

[70]Status of Political Parties In Election To The Lok Sabha - House of People
<https://data.gov.in/catalog/status-political-parties-election-lok-sabha-house-people>

[71]'How Microsoft's Analytics Is Making A Difference In The 2014 Indian Elections With Data Visualizations', (Lighthouse Insights, 22 April 2014)
<http://lighthouseinsights.in/how-microsofts-analytics-is-making-a-difference-in-the-2014-indian-elections-with-data-visualizations.html/>

will be involved in the 2019. Even for companies where there is clear involvement, the extent of involvement is not always clear.[72] For example, the BJP has issued statements in the press that there are many companies and individuals that have sought credit for involvement in the elections.[73] This makes it difficult to clearly understand and verify company participation and involvement. Some companies that have been generally associated with elections in India are mentioned below:

Analytics

SAP

Systems, Applications, Products in Data Processing is a global company that worked with the BJP party in the 2014 elections for tracking social media performance and in designing the BJP strategy. SAP offers a platform called SAP Social Media Analytics that provides social media monitoring, real time Facebook and Twitter Message Response, complete Social Profile and history, social media analytics, and implementation experience through simulated engagements.[74] Companies that SAP reportedly competed against for the contract in the 2014 elections include Salesforce and Adobe.[75]

Oracle

Oracle is a foreign company that, according to media reports, played a similar role in the elections as SAP, working with the BJP to help with social media analysis and strategy.[76] Though noted in news items, the multi-national company has not publicly announced its involvement in the elections and it is unclear what solutions were used.[77]

Modak Analytics

Modak Analytics is a domestic analytics company founded in 2010. The company offers a range of solutions and services – one being Modak Optimus a tool for managing campaigns and tracking their performance. Features of the solution included sending SMS and e-mail alerts to customers, geospatial analysis real time visualization of customers against attributes on geographic maps based component, interactive charts for displaying and selecting the data for attributes, segmentation schemes, predictive models, sampling of control groups using

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[72] 'BJP may have used affiliate for 2 state elections, not in LS 2014 polls', (Economic Times, 24 March, 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/bjp-may-have-used-affiliate-for-2-state-elections-not-in-ls-2014-polls/articleshow/63424095.cms>

[73] 'Congress, BJP trade charges over links with disgraced firm Cambridge Analytica', (Times of India, 21 March, 2018) <https://timesofindia.indiatimes.com/india/congress-bjp-trade-charges-over-links-with-disgraced-firm-cambridge-analytica/articleshow/63398048.cms?from=mdr>

[74] SAP Social Engagement Cloud, <https://www.sap.com/uk/products/cloud-customer-engagement/social-media-monitoring-cloud.html>

[75] 'The Role of SAP In The Historic Win of BJP', (30 January 2015), <https://www.stechies.com/role-sap-historic-win-bjp/>

[76] 'IT firms like SAP, Oracle helped Bharatiya Janata Party mount successful election campaign', (18 June 2014), <https://economictimes.indiatimes.com/news/politics-and-nation/it-firms-like-sap-oracle-helped-bharatiya-janata-party-mount-successful-election-campaign/articleshow/36728175.cms>

[77] Oracle Industries <https://www.oracle.com/industries/index.html>

segmentation schemes.[78]   During the 2014 elections, Modak Analytics built an Electoral Data Repository and developed heat maps, data visualizations, and machine learning algorithms.[79]

ThoughtBuzz

ThoughtBuzz is a domestic social media intelligence company that offers analytics platforms, a digital dashboard, as well as specific solutions in social media marketing, social selling, social customer management, and social customer service.[80] The company created a platform that tracked the sentiment around political manifestos during the 2014 elections.[81]

Germin8 Social Intelligence

germin8 Social Intelligence is a domestic company that is focused on analyzing and actionizing social media inputs in real time. Their products include Germin8 Social Listening collects content from social media platforms and user generated content sites and analyses the same with user generated content sites.[82] Trooya is a cloud based social media contact center that enables intelligent response to customers.[83] Germin8 social command center is a dedicated visual setup that allows for monitoring and engaging in social conversations.[84] In the 2014 elections, Germin8 and Bloomberg TV publicized analysis of the online conversations in the lead up to the general 2014 elections.[85] Germin8 also worked with ethinos digital marketing to create a report analysing online political conversations in September - November 2013.[86]

Strategic Communications Laboratory

It has been reported that Strategic Communications Limited (SCL), conducted behavioral research and polling for at least six state elections in India between 2003 and 2012, including the 2009 national election.[87] Cambridge Analytica's website states that it was contracted to work on the Bihar 2010 elections, but it does not mention the other campaigns cited in Wylie's leaked documents.[88] The OpCentre and its counterpoint mobile phone application will support

[78]Modak Optimus <http://www.modakanalytics.com/modak_optimus.html>
[79]'The First Prime Minister To Use Big Data', (Dataconomy, 23 May 2014)
<http://dataconomy.com/2014/05/narendra-modi-first-prime-minister-use-big-data-analytics/>
[80]Thought Buzz <http://www.thoughtbuzz.com/>
[81]'BJP's manifesto outnumbers rivals in social media mentions', (afaqs!, 22 April 2014)
<http://www.afaqs.com/news/story/40642_BJPs-manifesto-outnumbers-rivals-in-social-media-mentions>
[82]Germin8 Social Listening <http://www.germin8.com/products/germin8-social-listening/>
[83]Trooya <http://www.germin8.com/products/trooya/>
[84]Germin8 Social Listening <http://www.germin8.com/products/germin8-command-centre/>
[85]Political Capital - Elections 2014 - Social Media Pulse
<https://www.youtube.com/watch?feature=youtube_gdata&v=zbWZO6vh3ds>
[86]Voice of Democracy - Politics Report - In Collaboration with Germin8
<https://www.shocase.com/go/project/dw1sn8qrofydS1p8uheafpop00>
[87]'Whistleblower claims Cambridge Analytica's partners in India worked on elections, raising privacy fears', (Washington Post, 28 March 2018)
<https://www.washingtonpost.com/world/asia_pacific/whistleblower-claims-cambridge-analyticas-partners-in-india-worked-on-elections-raising-privacy-fears/2018/03/28/1168c04c-328a-11e8-b6bd-0084a1666987_story.html?utm_term=.f07fd316aad2>
[88]'Whistleblower claims Cambridge Analytica's partners in India worked on elections, raising privacy fears', (Washington

the client campaign team, functioning as the nerve centre for caste, political and party research design, data collection, and analysis. Together, this will provide the client with the capacity to deliver the right messages, from the right sources, disseminated through the right channels, and thus significantly increase the party's ability to win the election.[89] Services offered by SC include: Caste research, behavioural polling, party audit, government programme and issue evaluation, candidate research, desk based research and historical analysis, target audience analysis, result predictions and forecasting.[90] The privacy policy of the SCL group states that it may disclose personal data to political campaigns, independent expenditure groups, non-profit organizations, commercial entities, digital marketing platforms, mail vendors, call centers, research partners, affiliated data processors, and legal counsel.[91] SCL Group's customers are not limited to political parties and include defense establishments, the intelligence community, federal and civilian bodies, and governments[92]

Other analytics companies in India that have been reported as being connected to elections includes SM Netserve Technologies[93], Frrole[94] and Topsy.[95]

Marketing and Advertising

InMobi
InMobi, a domestic company, concentrated on creating native content and helping parties to target advertisers that offers a range of personalized advertising and marketing strategies.[96] InMobi has been quoted in news items for expecting revenues from India to rise by 30-40% in

Post, 28 March 2018)
<https://www.washingtonpost.com/world/asia_pacific/whistleblower-claims-cambridge-analyticas-partners-in-india-worked-on-elections-raising-privacy-fears/2018/03/28/1168c04c-328a-11e8-b6bd-0084a1666987_story.html?utm_term=.f07fd316aad2>

[89]'Cambridge Analytica's parent firm proposed a massive political machine for India's 2014 elections', (Quartz, 29 March 2018)
<https://qz.com/1239561/cambridge-analyticas-parent-firm-proposed-a-massive-political-machine-for-indias-2014-elections/>

[90]'Cambridge Analytica's parent firm proposed a massive political machine for India's 2014 elections', (Quartz, 29 March 2018)
<https://qz.com/1239561/cambridge-analyticas-parent-firm-proposed-a-massive-political-machine-for-indias-2014-elections/>

[91]Privacy Policy- SCL Group <https://sclgroup.cc/privacypolicy>

[92]Customers-Intelligence- SCL Group <https://sclgroup.cc/customers#intelligence>

[93]'Ballot To Business: Startups That Makes It Big From Elections', (Silicon India)
<https://www.siliconindia.com/news/startups/Ballot-To-Business-Startups-That-Makes-It-Big-From-Elections-nid-165122-cid-100.html>

[94]Frrole DeepSense <https://frrole.ai/>

[95]'Political Siri', Big Data Startups Rise Amid Indian Elections' (TechCrunch 15 April 2014)
<https://techcrunch.com/2014/04/15/political-siri-big-data-startups-rise-amid-indian-elections/>

[96]Inmobi <https://www.inmobi.com/company/>

2014.[97] News items also cite the company running advertisements for the BJP party - specifically on the parties policies on education and women's safety.[98]

Pinstorm

Pinstorm is a domestic marketing group that reportedly worked with leading political parties in the 2014 elections.[99] The company seeks to bring together strategy, research, user experience, web design, mobile friendliness, advertising, search optimization, viral videos, Facebook campaigns, Twitter updates, real-time listening, and responses as components in designing market strategies for clients.[100]

Soho Square

Soho Square is a domestic company that offers a number of advertising and marketing solutions[101].

Yaap

Yaap is a domestic content design company that works on content strategy and ideation, customized content, editorial content, video, marketing of content, publisher selection, publisher partnerships, content management, and optimization.[102]

Ogilvy and Mather

Ogilvy and Mather is a Global advertising company[103] which published a response to the Cambridge Analytica scandal.[104]

Other marketing and advertising companies that have been reportedly considered to work on certain aspects of elections in India include McCaan Worldgroup[105], Grey Worldwide India[106],

[97]'Elections to boost ad revenue of technology and social media firms' (Livemint 14 March 2014) <https://www.livemint.com/Consumer/b2Z2hpTBi36VLXEcYGGViO/Elections-to-boost-ad-revenue-of-technology-and-social-media.html>

[98]'Big-data analysis: How IT firms like SAP, Oracle helped Modi win' (Firstpost 28 June 2014) <https://www.firstpost.com/india/big-data-analysis-how-it-firms-like-sap-oracle-helped-modi-win-1576355.html>

[99]'The 2014 Elections Are the Most Expensive Ever Held in India', (Time 11 April 2014) <http://time.com/33062/india-elections-expenditure/>

[100]Pinstorm <http://www.pinstorm.com/>

[101] http://ww17.sohosquareasia.com/

[102]Yaap Digital <http://yaap.in/distribution.html>

[103]'Is Ogilvy & Mather working on BJP's 2014 poll campaign?' (Economic Times 21 November 2013) <https://economictimes.indiatimes.com/news/politics-and-nation/is-ogilvy-mather-working-on-bjps-2014-poll-campaign/articleshow/26116527.cms>

[104] https://image.ogilvy.com/wp-content/uploads/2018/04/Whitepaper_FB_Ogilvy.pdf (offline currently)

[105]'Is Ogilvy & Mather working on BJP's 2014 poll campaign?' (Times of India 28 January 2014) <https://timesofindia.indiatimes.com/india/BJP-close-to-unveiling-Rs-400cr-ad-blitz-for-polls/articleshow/29461560.cms>

[106]'BJP spends Rs 150 cr on 'India Shining' campaign' (Economic Times 19 May 2004) <https://economictimes.indiatimes.com/brand-equity/advertising/bjp-spends-rs-150-cr-on-india-shining-campaign/articleshow/684246.cms>

Netcore[107], the Crayons Advertising[108], and Brand Monachis.[109]

Visualization and Content Design

Gramener

Gramener is a domestic based data science company that collaborated with CNN-IBN and developed the 2014 election results page, a page for monitoring the 2014 elections[110] that included interactive features for live results, parliament elections, parliament maps, election factoids, and government performance. [111] The company also provided analytics in regional language - a market that the founding CEO as noted in the media as being a key and untapped market.[112] Tools provided by Gramener include the Gramex Platform and Autolysis - an automated analysis tool.[113]

ASMAN Software Solutions Private Limited India and Esri India

ASMAN Software Solutions Private Limited, a Hyderabad based web technologies and GIS solutions company and Esri India, a Delhi based GIS software and solutions provider, Collaborated to developed a solution that enabled voters and election officers to visualize relationships, patterns to understand constituencies and manage elector processes. The solution included a GIS based dashboard for CE and District Officers and a Mobile App for Officers, Booth Level Officers, Staff and Voters, routes to polling stations can be created, maps of district boundaries was created, a webcasting tool for monitoring of the voting process.[114]

PR and Lobbying

Madison World

[107]'BJP may have used affiliate for 2 state elections, not in LS 2014 polls' (Economic Times 24 March 2008) <https://economictimes.indiatimes.com/news/politics-and-nation/bjp-may-have-used-affiliate-for-2-state-elections-not-in-ls-2014-polls/articleshow/63424095.cms>

[108]'Ogilvy & Mather and Crayons shortlisted for BJP's publicity blitzkrieg in Uttar Pradesh' (Economic Times 21 October 2016) <https://economictimes.indiatimes.com/news/politics-and-nation/ogilvy-mather-and-crayons-shortlisted-for-bjps-publicity-blitzkrieg-in-uttar-pradesh/articleshow/54966148.cms>

[109]'Just the Right Image' (Business Today 8 June 2014) <https://www.businesstoday.in/magazine/case-study/case-study-strategy-tactics-behind-creation-of-brand-narendra-modi/story/206321.html>

[110]Parliament Elections <https://gramener.com/election/>

[111]'Design of the 2014 election results page' (17 May 2014) <http://blog.gramener.com/1755/design-of-the-2014-election-results-page>; Visualizing the Indian Elections <https://www.slideshare.net/gramener/visualizing-the-indian-elections>

[112] Graemner- Election <http://blog.gramener.com/tag/election>

[113]'Data Visualization is big in this election season and here's the company that's leading it' (Analytics India 24 February 2017) <https://analyticsindiamag.com/data-visualization-big-election-season-heres-company-thats-leading/>

[114]Esri India and Asman Software Solutions join hands to enhance electoral experience <http://www.esri.in/~/media/esri-india/files/pdfs/news/arcindianews/vol11_issue1/Partner_Showcase_Esri%20India_and_Asman_Software_Solutions_join_hands>

Madison Media is a domestic media communications company that reportedly provided media services to the BJP party in 2014.[115] Examples of other PR companies in India though not clearly involved in the 2014 elections include Genesis Burson Marsteller[116], Perfect Relations[117], and Creativizt Communications.[118]

Political Strategy Companies

Some political strategy companies associated with elections in India have been Association of Brilliant Minds[119], Indian Political Action Committee[120], Election Awaaz[121], Infoelection Leatech[122], Political Edge[123], The Campaign 360 Network[124] and Orkash[125].

Other Mobile Technology

A gamut of technological solutions aid and enhance the election process. Some examples are : An autonomous election body in India implemented Bahwan Cyber Tek's[126] monitoring and workflow tool, Election Watch, built on BCT's Cuecent Pulse, in order to monitor all Social Media posts relating to the election in real-time, enabling them to take immediate action against any and all complaints. SMS Achariya[127] provides mass messaging (sms) platforms for elections with the ability to reach 43 million numbers in 12 hours, Voice Tree[128] provides cloud based telephony services which can be used in crowd sourced calling campaigns to reach a large number of people, Invite Referrals[129] allows for referral marketing campaigns that have been used to collect donations for political campaigns.

[115]'It cost Narendra Modi $100 million to win the Indian election—here's how he spent it' (Quartz 16 January 2015) <https://qz.com/327771/it-cost-narendra-modi-100-million-to-win-the-indian-election-heres-how-he-spent-it/>
[116]Burson-Marsteller <http://www.genesisbm.in/>
[117]Perfect Relations <http://www.perfectrelations.com/>
[118]Creativizt Political PR <http://creativizt.com/political-pr.html>
[119]'Inside Track: Brilliant minds?' (Indian Express 16 October 2016) <https://indianexpress.com/article/opinion/columns/bjp-narendra-modi-uttar-pradesh-elections-prashant-kishor-inside-track-brilliant-minds-3085066/>
[120]'As Prashant Kishor Keeps Netas Guessing, Online Poll Drops Hint on Future Course' (News18 10 July 2018) <https://www.news18.com/news/politics/as-prashant-kishor-keeps-netas-guessing-online-poll-drops-hint-on-future-course-1807607.html>
[121]Election Awaaz <http://www.electionawaaz.org/>
[122]Info Elections <http://infoelections.com/infoelection/index.php/home>
[123]Political Edge <http://www.politicaledge.in/services.html>
[124]Campaign 360 <http://thecampaign360.pramanyastrategy.com/>
[125]Orkash <http://www.orkash.com/index.php?option=com_content&view=article&id=48&Itemid=84>
[126]Bahwan CyberTek <http://www.bahwancybertek.com/>
[127]SMS Achariya <http://www.smsachariya.com/>
[128]How Voice Tree Technologies is helping SMEs in workplace call management (Economic Times 14 September 2015) <https://economictimes.indiatimes.com/small-biz/startups/how-voice-tree-technologies-is-helping-smes-in-workplace-call-management/articleshow/48935065.cms>
[129]Invite Referrals <https://www.invitereferrals.com/>

Technology and concerns

There have always been concerns in the election process - many of which are formally addressed to a degree in law and policy. These include voter fraud, bribery and corruption, maintaining fair elections, paid news and political advertising, and manipulation. Yet, some argue that the use of big data and analytics bring into question the fairness and independence of elections.[130] Others argue that claims around big data subverting elections in India and foreigners influencing Indian elections with 'sophisticated digital technology' are ungrounded, misplaced, and a confusing of issues.[131] This section attempts to examine the concerns around the use of personal data through emerging technologies and techniques. Some of these are:

1. **Privacy**: In light of the 2018 scandal between Cambridge Analytica and Facebook, in which whistleblower Christopher Wylie disclosed that the Cambridge Analytica had done "extensive work in Indian politics in the past decade"[132] for both a national party and a major state party[133] the IT Ministry in India issued notices to both companies asking if they had *"engaged in any assignment to utilise data of Indians' pertaining to the recent breach and entities that had used its services."* The Ministry also requested information about the methods used to collect the data and if consent was taken from users.[134] This statement demonstrates an increased awareness and concern over how companies are accessing and using personal data and the influence on elections– particularly foreign companies.

   The Election Commission of India has not issued regulations as to the use of information - including PI and SPDI by political parties. To the extent that sensitive personal information is collected and used by body corporate, India's quasi data protection regime - section 43A and associated rules would apply. In the context of elections and this report, this would include media houses, analytics companies, social media companies etc. The provisions have been noted as inadequate.[135] Among other limitations, the Rules contain limited standards around consent and collection, apply

[130]'Cambridge Analytica CEO claims influence on U.S. election, Facebook questioned' (Reuters 20 March 2018) <https://www.reuters.com/article/us-facebook-cambridge-analytica/cambridge-analytica-ceo-claims-influence-on-u-s-election-facebook-questioned-idUSKBN1GW1SG>

[131]'Data or neta: Why big data is of little use when it comes to elections in India' (3 April 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/data-or-neta-why-big-data-is-of-little-use-when-it-comes-to-elections-in-india/articleshow/63586813.cms>

[132]'Cambridge Analytica In Asia: Modern-Day Colonialism, Or Empathy In The Digital Age?' (1 April 2018) <http://www.scmp.com/week-asia/politics/article/2139719/cambridge-analytica-asia-modern-day-colonialism-or-empathy>

[133]'Cambridge Analytica In Asia: Modern-Day Colonialism, Or Empathy In The Digital Age?' (1 April 2018) <http://www.scmp.com/week-asia/politics/article/2139719/cambridge-analytica-asia-modern-day-colonialism-or-empathy>

[134]'Cambridge Analytica Asks For More Time On India's Data Breach Notice' (2 April 2018) <https://www.ndtv.com/india-news/cambridge-analytica-asks-for-more-time-on-indias-data-breach-notice-1831928>

[135] Comments on the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 <https://cis-india.org/internet-governance/blog/comments-on-the-it-reasonable-security-practices-and-procedures-and-sensitive-personal-data-or-information-rules-2011>

predominately to sensitive personal data which is limited in definition[136], and excludes public sector bodies from its scope.[137] With respect to the limited definition of sensitive personal data, the Rules fail to include political opinions, ethnic origin, religious or philosophical beliefs, or trade union membership - all of which are recognized as sensitive personal data in the GDPR.[138] Furthermore, these types of data can be critical in elections and highly sensitive in nature and damaging depending on how used. By only extending principles of collection limitation etc. to SPDI the rules fail to account for the dynamic nature of data and how non-identifying data, when combined, can become or reveal personal data. Thus, with the current framework, the majority of data collected and used in elections in India falls outside of regulatory frameworks. In 2018 an Expert Committee chaired by Justice B.N Srikrishna was established by MEITY to develop recommendations towards a data protection legislation. On July 27th the Committee came out with its Report and draft Bill - which includes religious or political belief or affiliation as an SPDI and will bring under its scope foreign companies like Facebook and Twitter if they are involved in processing or profiling the data of data principals within the territory of India. The Bill also includes within the definition of 'harm' any discriminatory treatment and any subjection to blackmail or extortion.[139]

2. **Misuse**: Concerns have been voiced around the use of data and analytics for discrimination purposes and to create new proxies for polarization beyond gender, age, caste, sect, religion, and party affiliation.[140] At the sametime, others feel that the use of new data points will allow for a shift away from lines of polarization – particularly caste.[141]

3. **Opacity:** The collection and use of data by companies is opaque as is the extent of involvement of these companies in elections. It is difficult to find clear information about what data companies and campaign have accessed and how it was used. Furthermore, many of these companies provide services to multiple customers and the internal data practices are unclear. For example, the exact nature and depth of SCL India in past elections is unclear.[142] SCL has stated that both the BJP and the Indian National

[136]SPDI as per the Rules includes: (password; (ii) financial information such as Bank account or credit card or debit card or other payment instrument details ; (iii) physical, physiological and mental health condition; (iv) sexual orientation; (v) medical records and history; (vi) Biometric information; (vii) any detail relating to the above clauses as provided to body corporate for providing service; and (viii) any of the information received under above clauses by body corporate for processing, stored or processed under lawful contract or otherwise

[137]MEITY Notification GSR 313(E) <http://www.wipo.int/edocs/lexdocs/laws/en/in/in098en.pdf>

[138]Information Commissioner's Office <https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/>

[139]The Personal Data Protection Bill, 2018 <https://economictimes.indiatimes.com/photo/65164897.cms>

[140]'How Big Data Broke American Politics' (NBC News 15 March 2017) <https://www.nbcnews.com/politics/elections/how-big-data-broke-american-politics-n732901>

[141]'India's 'big data' election: 45,000 calls a day as pollsters target age, caste and religion', (The Guardian, 16 February 2017) <https://www.theguardian.com/world/2017/feb/16/india-big-data-election-pollsters-target-age-caste-religion-uttar-pradesh>

[142]'Whistleblower claims Cambridge Analytica's partners in India worked on elections, raising privacy fears', (Washington Post, March 28 2018) <https://www.washingtonpost.com/world/asia_pacific/whistleblower-claims-cambridge-analyticas-partners-in-india-worked

Congress have been clients, while both parties deny working with the company,[143] while the government has taken down the website of Ovlena Business Intelligence, the Indian arm that joined in a venture with the SCL Group - the parent company of Cambridge Analytica.[144]

4. **Control over data:** Whether data about Indian voters has been used and stored outside of India, has been raised. For example, media reports on Cambridge Analytica incident note that *"A disagreement emerged between Rai and Nix, he said, over where Indians' data should be stored. "We said the server should be hosted in India only. [Nix] wanted that India data should be hosted on his server. So it would be in their full control,"*.[145]

5. **Echo-chamber**: There is the concern that through the use of targeted messages, individuals will only be presented with content that fits their preferences as decided by the data and the algorithms behind these models.[146]

6. **Influence/manipulation:** Concerns have been raised that the technologies and techniques developed, have the ability to influence and manipulate voters through the use of granular and psychographic data . Yet, the exact impact and influence of online platforms and digital tools has been disputed. – The Internet Mobile Association of India has reported that social media had the ability to influence 3-4% of urban votes, [147] while some have argued that data analytics play a role in elections but are not the determining factor.[148] On this question the former Chief Election Commissioner posed the following questions in 2018: *"1. Is it possible for the Election Commission to police every message being spread via phone or internet? 2. Except on expenditure, why should the EC even bother if political parties use any tool, including Facebook, Twitter, to influence voters? 3. Are Indian voters so gullible that one social media or phone message will change their political choice? 4. Didn't political parties target voters by*

-on-elections-raising-privacy-fears/2018/03/28/1168c04c-328a-11e8-b6bd-0084a1666987_story.html?utm_term=.f07fd316 aad2>

[143]'India takes down local website of Cambridge Analytica', (BBC News, 21 March 2018) <http://www.bbc.com/news/world-asia-india-43482391>

[144] 'India takes down local website of Cambridge Analytica', (BBC News, 21 March 2018) <http://www.bbc.com/news/world-asia-india-43482391>

[145]'Whistleblower claims Cambridge Analytica's partners in India worked on elections, raising privacy fears', (Washington Post, March 28 2018) <https://www.washingtonpost.com/world/asia_pacific/whistleblower-claims-cambridge-analyticas-partners-in-india-worked -on-elections-raising-privacy-fears/2018/03/28/1168c04c-328a-11e8-b6bd-0084a1666987_story.html?utm_term=.f07fd316 aad2>

[146]'Inside the social media echo chamber' (Brookings 9 December 2016) <https://www.brookings.edu/blog/techtank/2016/12/09/inside-the-social-media-echo-chamber/>

[147]'Twitter and Polls: What Do 140 Characters Say About India General Elections 2014', (Twitter & Polls: Analyzing and estimating political orientation of Twitter users in India General Elections 2014, Abhishek Bhola, 06 June 2014) <https://www.slideshare.net/CERCatIIITD/twitter-and-polls-what-do-140-characters-say-about-india-general-elections-201 4>

[148]'Why India has nothing to fear from rightful use of big data', (Economic Times, 01 April, 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/why-india-has-nothing-to-fear-from-rightful-use-of-big-da ta/articleshow/63560703.cms>

using community leaders before SMS and mobile phones surfaced? 5. If social media is considered so important, why do political parties, for example in Tamil Nadu, still use one agent for every 50 voters?"[149] In light of the recent controversy with Facebook and Cambridge Analytica - the IT Minister of India has warned international platforms that any attempt to influence the upcoming elections in India would not be welcomed or tolerated. In response, Facebook committed to strengthening security features by leveraging technologies such as artificial intelligence to detect fake news and fake accounts.[150] In 2014, a study by psychologist at the American Institute for Behavioral Research and Technology, Robert Epstein focused on understanding Search Engine Manipulation Effect found that in a study of 1,800 undecided voters, 12.5% of votes could be shifted by manipulating search results.[151] There are a number of laws and Constitutional provisions directly applicable to elections in India including the Representation of the People Act, 1950 and 1951[152] - which allocates seats, delineates constituencies, defines the qualifications of voters, and provides a framework for preparing electoral rolls, and the Indian Penal Code - which defines penalty for bribery, undue influence, personation at elections, and failure to keep election accounts.[153]

7. **Regulatory Compliance:** Political parties in India must declare on sworn affidavits of the payment to data companies. In light of the revelations about Cambridge Analytica, experts have noted that it is unclear if political parties are fully adhering to this legal requirement.[154]

8. **Manipulation:** As noted in a 2015 Law commission Report on Electoral Reform, *"apprehensions against opinion polls arose, for example, in February 2014, when a sting operation by a Hindi news channel claimed that numerous poll agencies were willing to manipulate their poll projections by increasing their margin of error by a certain percentage of points, in favour of certain specific parties. Notwithstanding the effect such manipulations may have on the voting patterns of citizens, it does shake the confidence of the people in the findings of such opinion polls. More importantly, for a first-past-the-post system like ours, this can spell drastic changes in election results and*

[149]'Why India has nothing to fear from rightful use of big data', (Economic Times, 01 April, 2018) <https://economictimes.indiatimes.com/news/politics-and-nation/why-india-has-nothing-to-fear-from-rightful-use-of-big-data/articleshow/63560703.cms>

[150]'Facebook enhancing security features ahead of India elections: Mark Zuckerberg', (Mint, 22 March 2018) <https://www.livemint.com/Companies/oKko9s1vvJ1j5Mkj8iq9kJ/Facebook-enhancing-security-features-ahead-of-2019-elections.html>

[151]'Research in India suggests Google search results can influence an election', (Washington Post, 12 May 2014) <https://www.washingtonpost.com/news/the-switch/wp/2014/05/12/research-in-india-suggests-google-search-results-can-influence-an-election/?utm_term=.af9393b890bd>

[152]The Representation Of The People Act, 1950 <http://ceodelhi.nic.in/WriteReadData/ManualElectionLaw/REPRESENTATION%20OF%20THE%20PEOPLE%20ACT,%201950.pdf>

[153]Indian Penal Code 1860 section 171 A-I . Summary available at <https://www.srdlawnotes.com/2017/04/offences-relating-to-elections-indian.html>

[154]'India takes down local website of Cambridge Analytica', (BBC News, 21 March 2018) <http://www.bbc.com/news/world-asia-india-43482391>

hence, the need for regulation of opinion polls should be urgently addressed."[155]

Election Commission and Reforms

The Election Commission of India has been undertaking a number of reforms to address concerns related to elections. Some of these include:

Social Media
In October 2013, the Election Commission issued instructions on the use of social media by candidates. Candidates are required to submit an affidavit with their social media accounts and contact details, obtain precertification of all political advertisements on electronic media including those on social media, report on expenditure on campaigning through internet including social media websites and to companies making creative development content, and adhere to the model code of content on internet including social media.[156]

Campaign Finance
In 2013, in an attempt to bring transparency to campaign funding, a legal framework was established to allow private firms to donate any amount of funding to political parties as long as the amount is disclosed.[157]

Polling
Polling has traditionally been carried out as a means to understand the 'pulse' of the public during elections. News items have described the process as imperfect in India – with challenges in navigating cultural nuances and complexities, and reliable data. Traditionally, polling data has been carried out by private companies and market researching firms through door to door surveys and interviews. It has been noted that this method is expensive, prone to bias, and not comprehensive – resulting in extrapolation when making predictions.[158] In 1998 the Election Commission of India lay down the "Guidelines for Publication and Dissemination of Results of Opinion Polls/Exit Polls"[159] to create a framework around the conducting and publishing of polls. A new set of guidelines towards the same were published in 2009 by the

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[155]Report No. 255 on Electoral Reforms, Law Commission of India, March 2015
<http://lawcommissionofindia.nic.in/reports/Report255.pdf>
[156]Instructions of the Commission with respect to use of Social Media in Election Campaigning, Election Commission of India, 25 October 2013 <http://eci.nic.in/eci_main1/current/SocialMedia_CI25102013.pdf>
[157]'Black money power: Everyone knows the elections are costly', (The Economist, Asia, 04 May 2014)
<https://www.economist.com/blogs/banyan/2014/05/campaign-finance-india>
[158]'In India's National Election, Don't Trust the Polls', (The Diplomat, 24 February 2014)
<https://thediplomat.com/2014/02/in-indias-national-election-dont-trust-the-polls >

[159]Guidelines for Publication and Dissemination of Results of Opinion polls/Exit polls, Election Commission of India, 21 January 1998 <http://eci.nic.in/eci_main1/current/cp19980121.pdf>

Election Commission of India.[160]

Mass media, advertising and paid news

Starting in 2013, the Election Commission of India established district level Media Certification and Monitoring Committee to monitor cable TV and Satellite Channels, radio broadcasts and FM transmissions, and print media and social media for paid news and political advertising. In 2016, the Election Commission in Tamil Nadu partnered with Microsoft to monitor the social media posts of candidates for hate speech and paid content.[161] The manifestos of the political parties can be comprehensive[162]. The aim of the manifesto would be to inform the citizens of the aims and aspirations of the political party as well as to convert the voters to a party[163]. Mass media allows citizens to get information about the parties, the candidates, the policies and the process itself. It allows the citizens to weigh the information from different sources to make an informed choice. Print, Radio, TV and other forms of mass outreach have been used by parties to tout their achievements. The canvassing of the political parties and candidates can continue till 2 days to the poll date. The canvassing can take place through road shows, processions, meet and greet, large gatherings and through media. The EC prohibits the broadcasting and the propagation of election related material on TV, Radio and newspapers in the last two days. Only bulk SMS, IVRS and social media is allowed for transmission of election related material through the poll date with the advertisements requiring certification by the Media Certification and Monitoring Committee for the transmission of party or candidate propaganda[164].

Social Media

Starting in December 17th 2015, the Election Commission held a public consultation on the social media which touched on issues including understanding the functioning of Social Media and understand how it can benefit the Commission and the electorate of India and understand how to tackle unwanted agents and situations the Commission might face online and in real time.[165] In 2016, the Election Commission issued a communication on the use of social media by election officers.[166] In 2018, the Election Commission announced the creation of a 'social

[160]Guidelines for Publication and Dissemination of Results of Opinion polls/Exit polls, Election Commission of India, 17 February 2009 <http://eci.nic.in/eci_main1/current/pn170209.pdf >
[161]'EC to monitor social media accounts of TN candidates', (Hindustan Times, 04 August 2018) <https://www.hindustantimes.com/assembly-elections/ec-to-monitor-social-media-accounts-of-tn-candidates/story-iZNnXMmv04ABvInhf5dLlM.html>
[162]Bharatiya Janata Party Election Manifesto <https://www.bjp.org/images/pdf_2014/full_manifesto_english_07.04.2014.pdf>
[163]'Manifestos and Indian elections- The choice between the AAP, the BJP and the Congress is far from a real substantial choice', (Al Jazeera, 15 April 2014) <https://www.aljazeera.com/indepth/opinion/2014/04/manifestos-indian-elections-201441434237199300.html>
[164]'Election Commission issues prohibition protocol for 48 hours before Punjab poll', (Economic Times, 02 February 2017) <https://economictimes.indiatimes.com/news/politics-and-nation/election-commission-issues-prohibition-protocol-for-48-hours-before-punjab-poll/articleshow/56939881.cms>
[165]Use of Social Media, Election Comission of India <http://eci.nic.in/eci_main/Library&Publications/SocialMediaDocument_05042017.pdf>
[166]Use of Social Media- Regulation, Election Comission of India<http://eci.nic.in/eci_main1/current/ImpIns_06092016.pdf>

media hub' through which the commission will use Facebook and Youtube to share and distribute relevant and training material about elections.[167]

Voter Fraud

Voter fraud[168] has been a concern of the Election Commission for many years and starting in 1993 India issued EPIC, a voter ID card to improve accuracy and reduce fraud in the voting process. The card includes photographs and information incorporated in the existing rolls. Towards further addressing fraud, in 2018, the Election Commission of India filed a plea with the Supreme Court of India to make seeding of Aadhaar (India's 12 digit biometric based identity card) with EPIC, necessary.[169] The process of linking EPIC with Aadhaar was started in 2015-2016 under the National Electoral Roll Purification and Authentication programme[170] Starting in 2004, India fully implemented using Electronic Voting Machines in all polling stations. In 1998, the Electoral Rolls were digitized and are available for sale to the public and are provided to National and State parties.[171] The Electronic Voting Machines save time and report results and produce a voter verified paper trail. Electoral rolls have now been computerized and associated with the EPIC number of voters for cross linking.[172]

Conclusions

It is clear that the use of emerging technologies and data are raising important questions about impact including the impact on the fairness, independence, and impartiality of elections. From the above, the following can be observed:

- **Mobile penetration**: Mobile smartphone penetration in India is expected to reach 36%[173]

[167]'Election Commission of India launches social media communication hub; will be more active on Facebook and Youtube, (First Post, 24 January 2018) https://www.firstpost.com/tech/news-analysis/election-commission-of-india-launches-social-media-communication-hub-will-be-more-active-on-facebook-and-youtube-4318081.html>

[168]'Uttar Pradesh elections: Busted - fake fingers, real votes', (India Today, 23 February 2017) <https://www.indiatoday.in/assembly-elections-2017/uttar-pradesh-assembly-election-2017/story/uttar-pradesh-election-2017-voter-fraud-rigging-silicone-fingers-962353-2017-02-23>

[169]'Aadhaar linking news update: Election Commission appeals for mandatory seeding of 12-digit UID with Voter-ID', (Financial Express, 11 March, 2018) <http://www.financialexpress.com/aadhar-card/aadhaar-linking-news-update-election-commission-appeals-for-mandatory-seeding-of-12-digit-uid-with-voter-id/1094332/>

[170]'ECI Launches"National Electoral Roll Purification" (NERP)2016 to Improve health of Electoral Rolls and Optimize the Polling Station location and Area' (Press Information Bureau Government of India, 20 July 2016) <http://pib.nic.in/newsite/PrintRelease.aspx?relid=147324> and Improvement in Electoral Roll - Launching of National Electoral Rolls Purification and Authentication Programme (NERPAP), Election Commission of India <http://eci.nic.in/eci_main1/Current/Launching_of_Aadhar_Seeding_05032015.pdf>

[171]Election Commission of India, Function (Electoral Roll (<http://eci.nic.in/eci_main1/the_function.aspx#reservation>)

[172]Election Commission of India, Function (Reservation) (<http://eci.nic.in/eci_main1/the_function.aspx#reservation>)

[173]Smartphone users in India - penetration rate as share of mobile phone users 2014-2019, Statista.com <https://www.statista.com/statistics/257048/smartphone-user-penetration-in-india/>

of the population by 2018. This allows for unprecedented reach for political parties to express their views and onboard voters onto their platforms and vision directly. This will also require that organisations that work on electoral ethics have the funding and technological capacity as the political parties.

- **Messaging**: Media reports have also noted that the political parties 're-working' metrics and data to show desirable outcomes that will appeal to voters. As reach increases, assuring the quality and authenticity of the messages becomes critical.
- **Private players**: Private data collection and analytics companies are increasingly being commissioned to work in or otherwise entering the political space to impact voters. As seen with Cambridge Analytica, it might be pertinent for countries to establish frameworks for such partnerships.
- **Micro targeting**: New technologies like SMS, voice calling and referrals allow for independent candidates and small parties to raise funds and reach people as competently as well funded parties.
- **Tailored messaging**: Tailored messaging and forums could create an echo chamber. Creating a system that would necessarily allow multiple views could lead to a more informed voter.
- **Undecided and swing voter**: Depending on the way data analytics is used to target undecided, independent and swing voters and localities, frameworks and safeguards may be needed to protect against misuse and harm.
- **Personal data**: Though the ECI has taken a number of steps to develop a position on the use of social media in elections, it needs to more broadly engage with the question of use of publically available and private personal data in elections.
- **Oversight**: Oversight bodies might need to be established around electioneering techniques using data requiring disclosure of information such as methodology, sample size, techniques etc.
- **Data protection**: A Data protection law is needed in India that extends to the public and private sector and recognizes the evolving nature of data and rights.
- **Enforcement of existing regulation**: Enforcement of the existing regulations are not always clear. Technology can be used for solutions as a counter weight to infringements.
- **Publicly available data**: There is a need to clarify the use of publicly available data. One step could include securing and minimizing personal data available publicly.