Electionance: A Political Quiz for the 2016 West Bengal State Elections

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Electionance is an online quiz that calculates the level of policy agreement between individual voters and the political parties which contested in the 2016 West Bengal Legislative Assembly elections. We collected and analysed the demographic data and quiz responses of 914 people. Although this sample is not representative of the population of West Bengal, it demonstrates new possibilities for political and civic engagement through the Internet and social media.

23 May, 2016

Introduction

We built and released Electionance,[1] an online political quiz for the 2016 West Bengal Legislative Assembly elections. This interactive website collects users' stances on social, economic, and political issues and tells them how much they match with each of these major political parties contesting in the polls: the All India Trinamool Congress, Bharatiya Janata Party, Indian National Congress, and the Communist Party of India (Marxist).

Electionance is independent and remains unaffiliated with any political party or organisation.

Motivations and Background

We started this project to improve existing modes of political engagement on online and social media platforms. We hold that policies and proposals, not personalities or partisan mudslinging, should ground online political discourse. To achieve this, Electionance encourages users to think about concrete policy issues and reflect on their own party allegiances.

Electionance derives its methodology and format from Electionaire,[2] a political quiz made for the Singapore general elections in September 2015. Electionaire went viral and reached more than 181,000 users in a week. It demonstrated that a solidly-researched and well-designed political quiz tool can reach a mass audience and meaningfully engage them on political issues.

In January 2016, the Electionance team[3] decided to apply the Electionaire format and methodology to the West Bengal elections.

Methodology

For Electionance, we examined pertinent current affairs topics and created a list of 11 questions and options (Appendix I). For two questions, users could pick "Yes", "Neutral", or "No". For the others, they could perform multiple selections from a checklist.

Next, we assigned scores to each party based on their stances as expressed in their election manifesto. Only the INC had no manifesto for this election, so we used their 2014 general election manifesto. We also used the 2014 BJP manifesto to find its stance on one option. If any manifesto was silent on an issue, we searched for public statements from respective party leaders. If we found no sources on any particular issue, we recorded their stance as neutral.

For each question, a user may indicate how important it is to them. After the user answers all the questions, the quiz calculates a match percentage for each party. It applies the following algorithm:

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Total Deviation =
    Sum of:
    (user-specified qn importance) *
    (party value - user's value)

Match percentage =
    100 - total deviation /
    (max possible total deviation -
        min possible deviation)
```

Finally, it displays the results along with an anonymous demographic survey which collects the respondent's age, gender, district, and the party which they currently support. Along with their quiz responses, the demographic data is stored in a private database, to which only we have access.

Timeline

The election was held in several stages from 4 April to 5 May 2016. Electionaire launched on 23

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[1] http://electionance.com

[2] http://electionaire.info

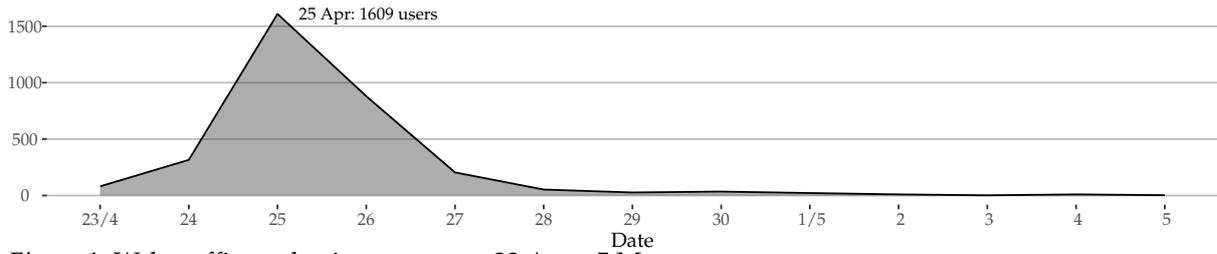[3] One of the authors, Koh Wei Jie, is a member of the Electionaire team.

Figure 1. Web traffic to electionance.com, 23 Apr - 5 May.

April. This was two days before Phase IV of polls, in which many urban constituencies were scheduled to vote.

1. 23 April, 4.30pm:[4] Launched the website and shared it on Facebook. Launched Facebook adverts targeting users in West Bengal.

2. 25 April, 1.45pm: Restricted the number of answers per pick-many question to a maximum of two.

3. 25 April, 6.20pm: Added the question "Which party do you support?" to the demographic survey.

4. 5 May, 4.56pm: Collected the last data point for this final polling day.

Web traffic

From 23 April to 5 May, at least 3,093 people visited the website.[5] Traffic spiked two days after launch (1609 users on 25 April). Roughly 75% of all users clicked on a link on Facebook to reach the site, and the rest typed in the URL directly. 83% of all traffic came from India, followed by 7% from the United States and 5% from Singapore. Half of all users were in Kolkata.

Demographics

Our results are not representative of the population. The Electionaire users who filled out the demographic survey are mostly young, male, and urban. We attribute this to low Internet penetration in rural areas, lower political participation among women, as well as higher social media use and technology literacy among youth.
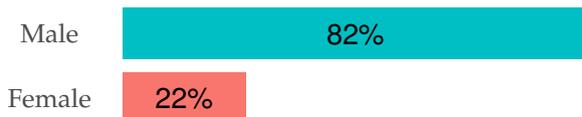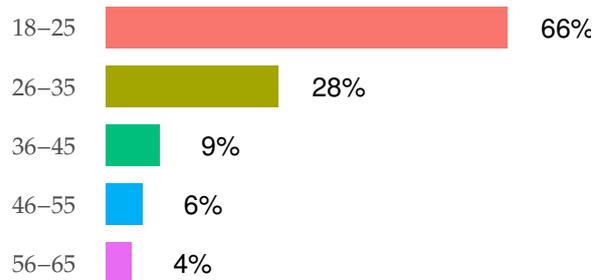

Figure 2. Gender of all respondents (n=914)

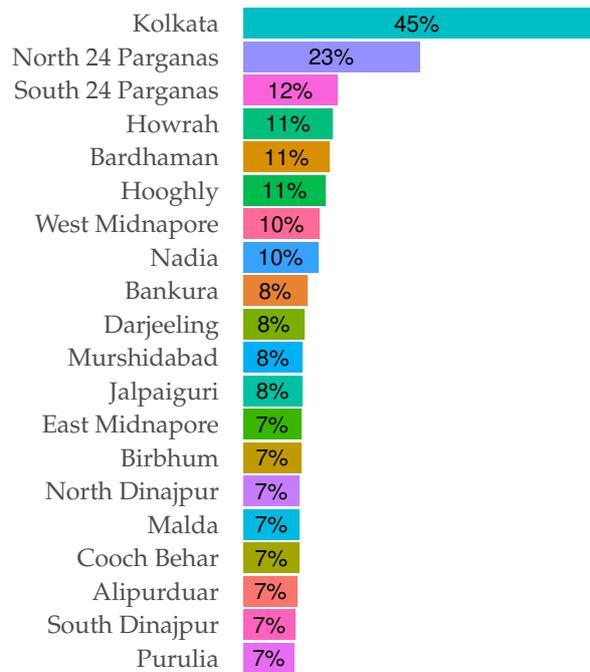
Figure 3. Age ranges of all respondents (n=914)

Figure 4. Districts of all respondents (n=914)

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[4]All times are in India Standard Time (GMT+5:30).
[5]We used Google Analytics to track web traffic.

Political Analysis

Self-declared party allegiance

We took responses to the demographic survey question, "Which party do you currently support," as self-declared party allegiance. Upon analysis, we found that it sharply divides our sample. Almost half do not identify with any of the four parties (46%), while more than a third side with the CPI(M) (36%). Only one in ten declares support for the incumbent AITC, while 7% support the BJP. Finally, INC supporters form a very small minority (2%).
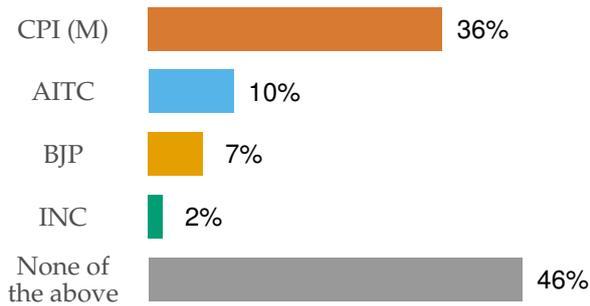

Figure 5. Responses to "Which party do you support?", 25 Apr - 5 May (n=512)

Party allegiance by age

In our sample, every party has roughly the same proportion of support from each age group. The only exceptions are minor: youth make up the largest proportion of CPI(M) supporters (65%), but only 8% more than their AITC counterparts, and 7% more than those who declare no allegiance to any of the four parties.

Figure 6. Party allegiance broken down by age range, 25 Apr - 5 May (n=512)

Party rankings

After taking the quiz, each user received a list of parties ranked by their match percentage. We recorded the party rankings of only those who submitted the demographic survey. The remainder of this report will examine the relationship between party rankings and self-reported party allegiance (as described above).

Our sample contains two segments: pick-all and pick-two respondents. On 25 April, we restricted the maximum number of selections to multiple-selection questions to two. This was because the scores for each party tended to cluster too closely together. By forcing users to choose only up to two options, we spread the scores further apart and thereby made them more more meaningful.

In the pick-all sub-sample—with no restrictions on the number of selections—the CPI(M) has a very strong showing in its calculated matches. In contrast, the AITC and BJP fare much worse, mostly ranking the lowest and second-lowest respectively.
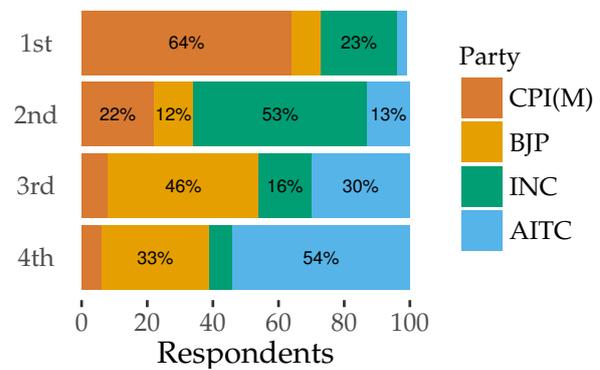

Figure 7. Calculated party rankings for pick-all responses, 23 - 25 Apr (n=214)

CPI(M) ranks higher with the pick-two sub-sample. For three-fourths of respondents, it is their highest-ranked party. The AITC only does slightly better, and the BJP takes fourth place 45% of the time.
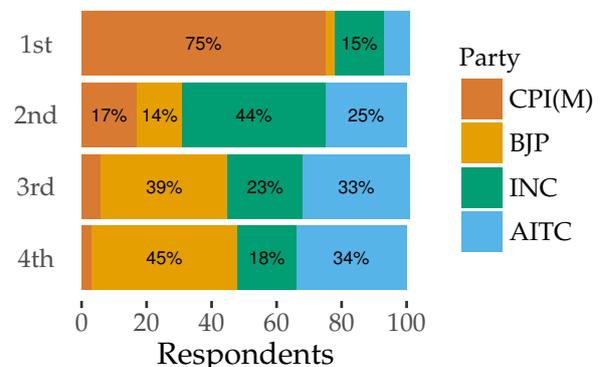

Figure 8. Calculated party rankings for pick-two responses, 25 Apr - 5 May (n=700)
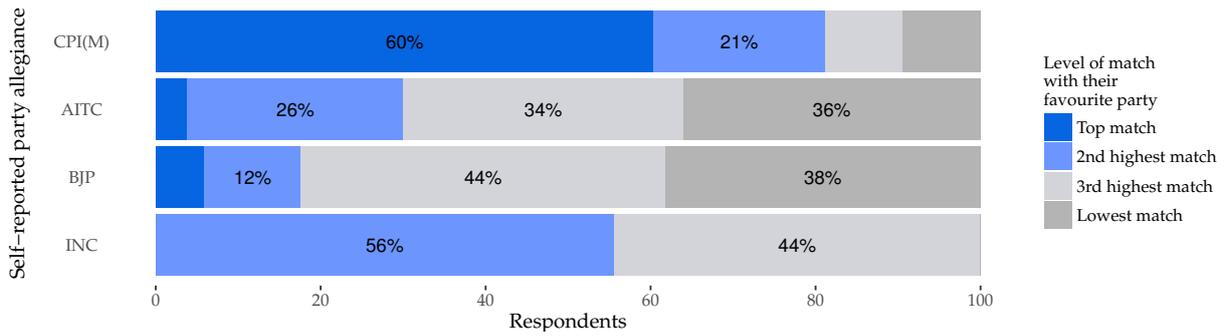
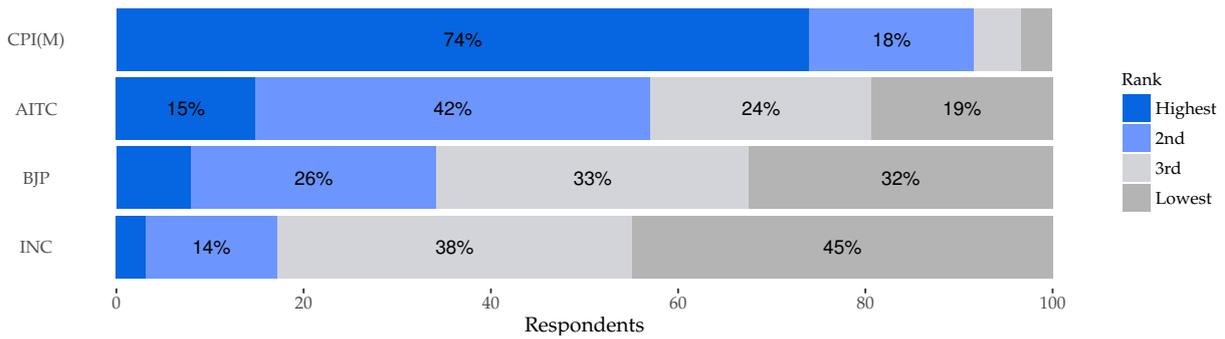*Figure 9.* How strongly pick-two respondents matched with their favourite party, 25 Apr - 5 May (n=700)

Figure 10. How strongly uncommitted respondents matched with each party, 25 Apr - 5 May (n=233)

Policy stances do not necessarily determine party allegiance

AITC and BJP supporters might have been surprised at their results. We found that these respondents' personal policy stances mostly do not match their respective parties of choice (figure 9). 70% of those who say that they currently support the AITC have it ranked at third or last place, like 82% of BJP supporters. Most self-declared CPI(M) supporters (60%), however, have it as their top match.

Party rankings of uncommitted respondents

Uncommitted respondents—those who indicated that they support "none of the above parties"—match more strongly with the AITC than those who support any other party (figure 10). Compared to committed respondents, AITC's performance among uncommitted respondents more than double, and appear in the top two positions for 63% of this group. Nevertheless, the majority of uncommitted respondents match strongly with the CPI(M): 90% had it among their top two matches.

Ruling out survey instrument bias

Not only did we take every effort to fairly and accurately represent each party's positions, we can demonstrate that instrument skew—bias towards any particular party inherent in the questions and options—did not cause the CPI(M) to

be the highest ranked party for most respondents (see figures 7 and 8).

We conducted a simulation of 10,000 respondents giving random answers (figure 11). It shows that the expected figure from this unbiased population (36%) was less than half the actual proportion of respondents with CPI(M) as their highest-ranked party (75%).

If the quiz questions and options were perfectly balanced, each party would receive an equal share of the top rank (25%). Yet the respondents matched with the the CPI(M) to an extent far greater—39% more than expected—than the effect of instrument skew.
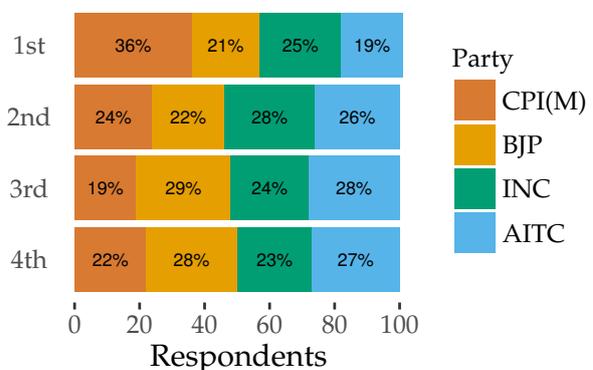

Figure 11. Party rankings from 10,000 simulated random pick-two choices

Conclusion

Electionance demonstrates an intuitive, efficient, and informative way to start discussions about policies and reflect on politics. It can educate large numbers of voters on policy proposals and thereby help to focus political discourse on policy proposals instead of dwelling on personalities. Its intuitive design allows the average user to learn about issues pertinent to an election quickly and memorably, rather than trawl through pages of manifestos and speeches. Finally, Electionance demonstrates that large datasets of demographics, policy stances, and political allegiances can be collected with relatively little cost. More work is needed to ensure that future Electionance-style quizzes can collect representative data so that statistically valid political insights can me made about the relationships between individuals' political allegiances and policy stances.

Appendix I: Survey Questions

1. Civil rights, such as democracy and secularism, must be protected.

   (a) Yes

   (b) Neutral

   (c) No

2. The government should rapidly develop West Bengal's road infrastructure by building new roads, flyovers and highways.

   (a) Yes

   (b) Neutral

   (c) No

3. Inclusive development in Bengal should encompass the following:

   (a) Empower small industries, medium, small and micro industries

   (b) Promote rural arts, crafts and artisans with rural welfare as a focal agenda

   (c) Focus on developmental projects such as housing, water, sanitation, and power

   (d) Enact a universal public-goods distribution system to tackle fundamental issues such as starvation

4. Educational institutes in the State must be strengthened through:

   (a) Protect free speech and spaces for dissent

   (b) Establish greater industry linkages with strong vocational training

   (c) De-politicize higher education, especially in faculty appointment and college administration

   (d) Establish more centers and institutes for higher education

5. Women's rights and safety must be addressed with the following means:

   (a) Improve law and order to enable women to access all public spaces

   (b) Place a central focus on women's education and income security

   (c) Change the police force to be more responsive and gender-sensitive, and introduce police units dedicated to women

   (d) Include gender issues in school curricula in schools and colleges to increase awareness

6. Workers' rights can be significantly improved through:

   (a) Protect the rights of contractual and daily wage workers

   (b) Give unemployed workers subsidies and income allowances

   (c) Provide insurance, pension, benefits and leaves to part time, small, and daily wage workers

   (d) Provide female workers' rights through maternity leaves, benefits and flexibility

7. Healthcare in Bengal can be improved through the following means:

   (a) Facilitate the construction of super-speciality hospitals

   (b) Reduce child and infant mortality, with a special focus on the girl child

   (c) Increase the capacity of current health infrastructure

   (d) Increase maternity leave for women employees

8. Immigration and infiltration from Bangladesh poses a challenge for governance in Bengal and it must be dealt through:

   (a) Tighten immigration from Bangladesh to reduce demographic change in West Bengal

   (b) Deport illegal immigrants but protect Indian citizens

   (c) Provide education and job opportunities to persecuted Hindu refugees

   (d) Increase the border security force further

9. Religious minorities, especially Muslims, are underdeveloped in West Bengal right now and their condition can be alleviated through:

   (a) Assist religious minorities with their overall social and economic development

   (b) Change Madrasa curriculums to help Muslim students to integrate with wider society

   (c) Provide government grants to approved Madrasas

   (d) Improve education opportunities for Madrasa students in science and technology

10. For better governance, corruption among the ruling classes needs to be tackled with the following methods:

    (a) Enact strong policy initiatives to identify and tackle corruption issues

    (b) Implement e-governance and digital transparency for greater accountability

    (c) Ensure public accountability for government positions

    (d) Track black money and black market trades

    (e) Deal with financial scandals such as the Saradha Group scandal as an immediate priority

11. Industrialization is a key driver of economic development for Bengal and can be achieved through the following means:

    (a) Encourage private investment

    (b) Build industrial parks and centers with a focus on infrastructure and connectivity

    (c) Promote intellectual industries such as IT and services

    (d) Increase the ease of doing business in Bengal

    (e) Land acquisition is important for industry but should be done cautiously

Appendix II: Party Stances

The party stances for every question can be found in this spreadsheet: `http://bit.ly/1OFvx1j`.

Copies of all the manifestos may be found at `http://bit.ly/1rVQ3WL`.