

# Data science's impact on election strategies

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## Introduction

In the political campaign landscape, data has increased from broad samples of voter data to voter mapping so specific it can predict voter behavior at the residential level. The sources of data include everything from voter registration to choices of entertainment. The increase of big data has impacted the strategies of political campaigns in advertising targeting to policy building and event planning.

Overall, the current state of data science in political campaigning has seen pros and cons to changes in voter engagement and public policy. If a voter is not in a particular voting block, they may be ignored by their potential representatives. Public policies that are important but not engaging to key voters may not be advocated for by the representative. Alternatively, data has allowed representatives to engage more specifically with the electorate and create policies for issues that they may not have thought was as vital to their constituents.



## Acknowledgements

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## Why is this Data Science?

Political Data Scientists must find the most efficient and effective ways to organize a campaign.<sup>1</sup> These discoveries will target where advertisements are placed, which voters are targeted, policies discussed on the campaign trail, and how to reach donors.<sup>1</sup> The first implementation of pre-election polling with scientific sampling was in 1936 and candidates have used some sort of political polling since then to build a campaign strategy.<sup>2</sup> However, these polls only reveal the intentions of a voter and do not explore the reasons why.<sup>2</sup> Having information about the values of voters can help predict why a voter is stating their intentions the way they do.<sup>2</sup> Campaigns need to know this information so that they can know which voters to target and what messages should be delivered to these voters and their corresponding values.<sup>3</sup>

Campaigns must select data that helps them form an impression of the electorate and their values.<sup>3</sup> The data can come from various sources including public information from the government or from outside entities.<sup>3</sup> However, the data is selected and viewed, the available data informs a campaign's decision.<sup>3</sup> The introduction of big data changes the availability of resources for campaigns to use. As a result, new data will reflect a change in politics, which will lead to scientists to study political science when they may not have previously, which subsequently lead to new ethical questions and models that deal with these questions.<sup>5</sup>

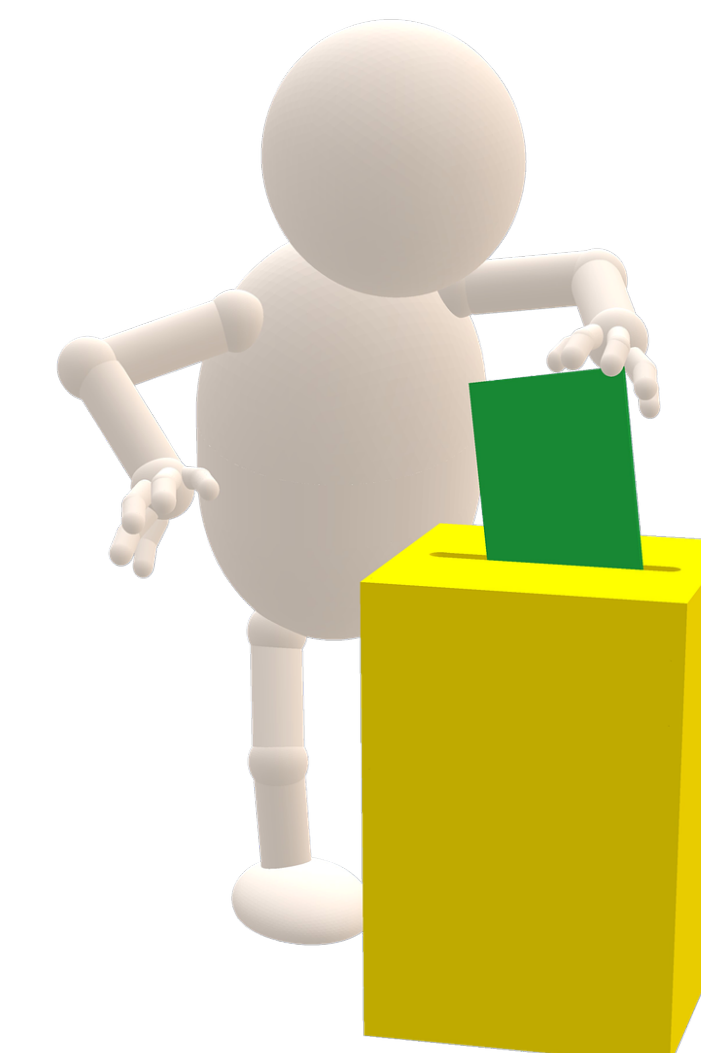
Different models have already been built and tested to use big data to understand voters in this manner. One example is the Proximity Rule that uses an algorithm to measure a voter's preferences and how close their views are (proximity) to either one of two candidates in a particular district.<sup>4</sup> Another example is the Perceived Voter Model which uses various attributes of a voter for the campaign to perceive such behaviors as the voter's likely partisan support, issue support, and likelihood to turn out to vote.<sup>3</sup>

## What is the deliverable for this project?

Since there is more data to be reviewed, there are two concerns that arise about how this new wealth of data is being used by campaigns: voters being ignored because the data segments them from a campaign's target and the quality and use of public policy proposals.

Voter registration records enable campaigns to not only determine who is likely to support them but also who is unlikely to support them which can result in a candidate only focusing on the 51% of the constituency. The microtargeting can subsequently lead to voters not being exposed to alternative political viewpoints.

When it comes to understanding of public policy, the majority of the electorate are ill-equipped to comprehend the proposals that are being made to them. Additional factors in voter awareness (including candidates with incumbency and campaign spending on advertising) can lead to voters supporting policies that are not in their own interest. In one election that was studied, candidates spoke about policy proposals in short statements on social media and showed little engagement with the follow-up on the proposal.



## Conclusions

The use of models on big data in the Political Science arena are still new and being tested. There are signs of campaigns using the data to take shortcuts on engaging with new voters.<sup>3</sup> While this is appealing because it speaks to the efficiency and effectiveness that campaigns strive for, it is still relatively untested as a campaign strategy. When it comes to engagement with public policy proposals, the messaging has evolved along with social media where campaigns can place a brief synopsis and have little follow-up. However, it is difficult to argue that voter understanding of policies has declined.

## References

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