

Ethics of Behavioral Analytics in Political Campaigns

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Ethics of Behavioral Analytics in Political Campaigns

The use of behavioral analytics in political campaigns had raised significant ethical concerns at the intersection of data science, psychology, and democratic processes. Behavioral analytics have become increasingly possible due to the unprecedented level of granular data available in today's digital landscape. Modern data collection techniques allow for the capture of highly detailed information, often at the level of individual user interactions or even millisecond-by-millisecond behavior patterns (LiveRamp, 2024; SnowPlow, n.d.). Appendix A contains a diagram showing how behavioral data relates to other data types.

This fine-grained data enables businesses to analyze and understand customer behavior with remarkable precision, unlocking insights that were previously unattainable (Data Calculus, n.d.). The proliferation of digital touchpoints, combined with advanced data storage and processing capabilities, has made it feasible to collect and analyze vast amounts of behavioral data in real-time, allowing for more accurate predictions and personalized experiences (Statsig, 2024). Furthermore, the integration of artificial intelligence and machine learning technologies has enhanced the ability to process and derive meaningful insights from this granular data, making behavioral analytics more powerful and accessible than ever before (MixMode, 2023).

This paper examines the ethical considerations surrounding the application of behavioral science techniques by data analytics entities to help political candidates tailor their campaign messages. We will explore two key examples of how behavioral analytics relates to software engineering ethics, analyze real-world scenarios, and evaluate the practice through the lens of professional codes of ethics.

Cambridge Analytica

The 2016 election between Hillary Clinton and Donald Trump shed new light on how social media, technology companies, and potentially unethical data collection techniques were leveraged to advance the marketing efforts of political campaigns. The company in focus for the 2016 election cycle was Cambridge Analytica, now a former British political consulting firm, that gained notoriety for its controversial use of personal data in political campaigns. The company harvested data from up to 87 million Facebook users without their consent through an app called "This Is Your Digital Life".

This data was then used to create detailed psychological profiles of voters, which were then utilized to target individuals with personalized political advertisements. (Merrill & Goldhill, 2020)

The firm employed a technique called *psychographic modeling*, assigning scores to voters based on five personality traits: *openness, conscientiousness, extraversion, agreeableness, and neuroticism* (Merrill, & Goldhill, 2020). These profiles, derived through different combinations of the traits, were used to tailor political messages and ads to potential voters (Ghosh, & Scott, 2018). Cambridge Analytica claimed to have run over 5,000 ad campaigns for the Trump campaign which generated 1.5 billion impressions during the election cycle (Fischer, 2020).

The scandal, which came to light in 2018, sparked widespread concerns about data privacy, the influence of social media on politics, and the ethical implications of using personal information for political manipulation (Harbath & Fernekes, 2023). It led to investigations in multiple countries, significant backlash against Facebook, and ultimately contributed to Cambridge Analytica's bankruptcy.

Behavioral Analytics and Software Engineering Ethics

Behavioral analytics in software engineering raises significant ethical concerns, particularly regarding user privacy and data manipulation. The ACM Code of Ethics emphasizes the importance of respecting privacy (Principle 1.6) and avoiding harm (Principle 1.2), which are directly relevant to the collection and use of behavioral data in software systems. Software engineers must carefully consider the ethical implications of implementing behavioral analytics features, ensuring transparency in data collection practices and obtaining informed consent from users, in line with the ACM Code's emphasis on honesty and trustworthiness (Principle 1.3). (ACM, 2018)

Privacy and Data Collection

One of the primary ethical concerns in behavioral analytics is the collection and use of personal data. Political campaigns increasingly rely on vast amounts of voter data to build detailed profiles and predict voting behavior (Voleti, 2020, Nickerson & Rogers, 2014). This practice directly relates to the ACM Code of Ethics principle 1.6, which states that computing professionals should "respect privacy" (ACM Council, 2018).

Software engineers developing behavioral analytics systems for political campaigns must grapple with ethical questions around data collection, storage, and usage. For instance, the Cambridge Analytica scandal highlighted the potential for misuse of personal data in political microtargeting (Cadwalladr & Graham-Harrison, 2018). This case demonstrated how seemingly innocuous data, when combined with sophisticated analytics, could be used to manipulate voter behavior without their knowledge or consent.

Real-world scenario: In 2016, the Trump campaign used Cambridge Analytica's services to target voters with personalized political ads based on psychological profiles derived from Facebook data (Cadwalladr & Graham-Harrison, 2018). This raised serious concerns about privacy violations and the ethical use of personal information in political campaigns.

Transparency and Informed Consent

Another critical ethical consideration is the transparency of behavioral analytics techniques and the informed consent of voters. The ACM Code of Ethics principle 1.3 emphasizes the importance of honesty and trustworthiness (ACM Council, 2018). When political campaigns use behavioral analytics to tailor messages, there's a risk of manipulating voters without their awareness or consent. Software engineers must consider how to design systems that respect voters' autonomy and right to make informed decisions. This includes questions about how to disclose the use of behavioral analytics techniques and ensure that voters understand how their data is being used to influence them.

Real-world scenario: The 2012 Obama campaign used data analytics to identify undecided voters and tailor messages to them (Issenberg, 2012). This approach is also called microtargeting (Barbu, 2014). While this approach was innovative, it raised questions about whether voters were aware of how their data was being used to influence their political choices. (LSU Online, 2020)

Ethical Analysis

The use of behavioral analytics in political campaigns presents a complex ethical landscape. On one hand, these techniques can potentially increase voter engagement and provide more relevant information to citizens. On the other hand, they risk undermining democratic processes by manipulating voters and exacerbating existing biases.

From a utilitarian perspective, one could argue that behavioral analytics can lead to more efficient and effective campaigns, potentially increasing voter turnout and engagement. However, this must be balanced against the potential harm to individual autonomy and the integrity of democratic processes.

The ACM Code of Ethics provides valuable guidance in navigating these issues. Principle 1.2 states that computing professionals should "avoid harm" (ACM Council, 2018). In the context of political campaigns, this could mean ensuring that behavioral analytics techniques do not unduly influence or manipulate voters. Additionally, principle 3.7 emphasizes the need to recognize and take special care of systems that become integrated into the infrastructure of society (ACM Council, 2018). Political campaigns increasingly rely on behavioral analytics, and as such, software engineers have a responsibility to consider the broader societal implications of these systems.

Opinionated Analysis

In my view, while behavioral analytics can offer valuable insights and potentially increase political engagement, its use in political campaigns must be carefully regulated and transparent. The power of these techniques to influence voter behavior, combined with the often-opaque nature of the algorithms involved, poses significant risks to democratic processes. I believe that political campaigns should be required to disclose their use of behavioral analytics techniques and provide clear information to voters about how their data is being used. Additionally, there should be strict limits on the types of data that can be collected and used for political purposes.

However, I also recognize the potential benefits of behavioral analytics in increasing voter participation and providing more relevant information to citizens. The key is to strike a balance between leveraging these technologies for positive outcomes and protecting individual privacy and autonomy.

Conclusion

The use of behavioral analytics in political campaigns represents a critical intersection of technology, ethics, and democratic values that demands careful consideration from all stakeholders. As demonstrated through the Cambridge Analytica case and other examples, the power to collect and analyze granular behavioral data brings both opportunities and significant risks to the democratic process.

The ethical framework provided by the ACM Code of Ethics, particularly its emphasis on privacy, transparency, and avoiding harm, offers essential guidance for software engineers and political campaigns in navigating these challenges. (Kozlowski, 2019)

Looking ahead, the evolution of behavioral analytics technology will likely continue to present new ethical challenges and opportunities in political campaigning. To maintain the integrity of democratic processes while benefiting from technological advances, it is crucial to establish and enforce clear guidelines for data collection and usage, ensure transparency in campaign practices, and prioritize voter autonomy. Only through thoughtful regulation, ethical implementation, and ongoing dialogue between technology professionals, political actors, and the public can we harness the potential of behavioral analytics while protecting the fundamental principles of democratic society.

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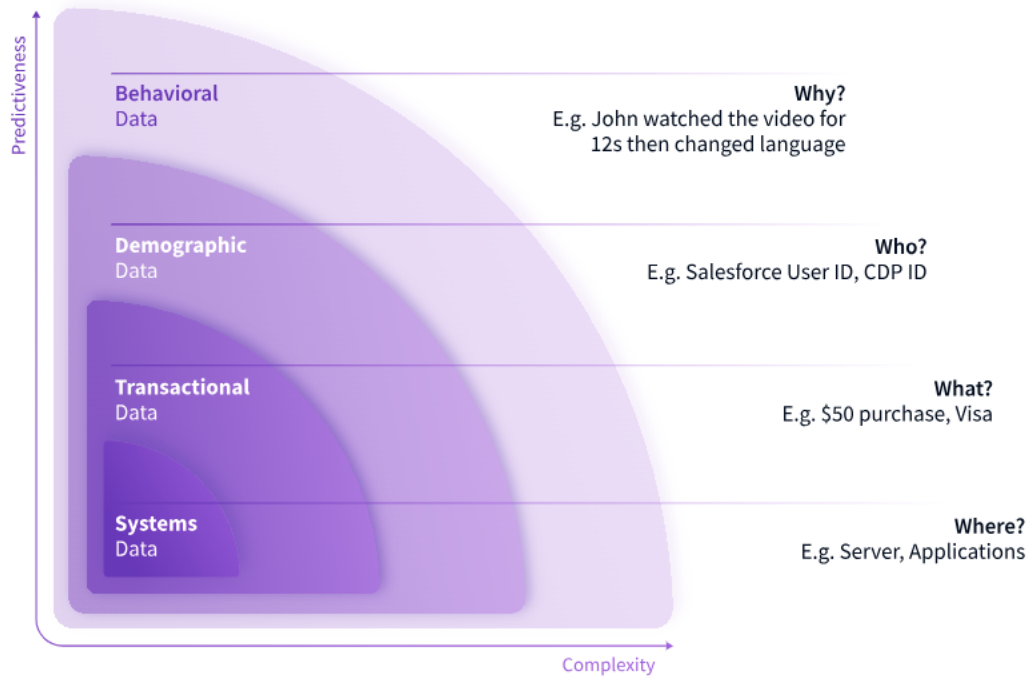
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Appendix

Appendix A: How Behavioral Data Compares to other Data Types



(source: SnowPlow, n.d.)