



Digital Commons@

Loyola Marymount University
LMU Loyola Law School

Honors Thesis

Honors Program

5-6-2019

Every Data Point Counts: Political Elections in the Age of Digital Analytics

Julian Kehle

juliankehle@comcast.net

Samir Naimi

Loyola Marymount University, snaimi@lmu.edu

Follow this and additional works at: <https://digitalcommons.lmu.edu/honors-thesis>



Part of the [American Politics Commons](#), [Artificial Intelligence and Robotics Commons](#), [Graphic Design Commons](#), [Political History Commons](#), and the [Science and Technology Studies Commons](#)

Recommended Citation

Kehle, Julian and Naimi, Samir, "Every Data Point Counts: Political Elections in the Age of Digital Analytics" (2019). *Honors Thesis*. 207.

<https://digitalcommons.lmu.edu/honors-thesis/207>

This Honors Thesis is brought to you for free and open access by the Honors Program at Digital Commons @ Loyola Marymount University and Loyola Law School. It has been accepted for inclusion in Honors Thesis by an authorized administrator of Digital Commons@Loyola Marymount University and Loyola Law School. For more information, please contact digitalcommons@lmu.edu.



Every Data Point Counts: Political Elections in the Age of Digital Analytics

A thesis submitted in partial satisfaction
of the requirements of the University Honors Program
of Loyola Marymount University

by

Julian Kehle

Samir Naimi (Faculty Mentor)

May 6, 2019

Every **DATA** **Vote** Counts **POINT**

★ *Political Elections in the Age of Digital Analytics* ★

Julian Kehle
Mentored by Samir Naimi



Synthesizing the investigative research and cautionary messages from experts in the fields of technology, political science, and behavioral science, this project explores the ways in which digital analytics has begun to influence the American political arena. Historically, political parties have constructed systems to target voters and win elections. However, rapid changes in the field of technology (such as big data, artificial intelligence, and the prevalence of social media) threaten to undermine the integrity of elections themselves. Future political campaigns will utilize profiling to micro-target individuals in order to manipulate and persuade them with hyper-personalized political content. Most dangerously, the average American voter does not understand how these technologies will influence elections. This research project simplifies the complex technological and sociopolitical landscape in order to educate the public on the issue. Even more important than understanding the problem is arming people with practical solutions to combat this intimidating problem. Therefore, this project utilizes the language of visual design to turn something complex and intimidating into something approachable and empowering. This academic and creative contribution aims to ensure that American elections remain free and fair.

Every **DATA POINT** Counts

★ Political Elections in the Age of Digital Analytics ★

A Recipe for Disaster

Experts predict that political elections will radically change in the near future. The main factors are already in play:

Historical Precedent

For over a century, U.S. presidential candidates have utilized innovative technologies and data-driven strategies to win elections. This trend is likely to continue in 2020 and beyond.



The Cambridge Analytica Scandal

The 2016 Presidential Election demonstrated the dangers of politicians using big data and social media for mass-scale, hyper-targeted advertising. Cambridge Analytica, a political consulting firm that bought a database of around 5,000 data points on over 200 million Facebook users. In early 2018, whistleblower Christopher Wylie exposed Cambridge Analytica for illegally harvesting personal data from as many as 87 million users and using it for political purposes. The scandal resulted in Facebook CEO Mark Zuckerberg testifying in front of the U.S. Congress.

87 million Facebook users had their data used illegally

Psychographics

Psychographic profiling is a type of micro-targeting technique where data scientists predict an individual's personality and then design advertisements based on that profile. Cambridge Analytica was suspected of having used psychographics during the Trump campaign, but this claim was denied by former CEO Alexander Nix.

Data scientists will soon know your personality more accurately than your closest friends and family.

Psychometric profiling violates privacy rights because anyone with enough personal data can accurately predict highly intimate details about you, more of which you never disclosed online.

The Internet of Things

The Internet of Things (or IoT) refers to the interconnected network of smart devices and everyday objects. According to Intel, there were 13 billion devices connected to the IoT in 2019. By 2020, this number could grow to 200 billion.

Computer systems researchers are struggling to combat the emerging threats to data security and privacy. The number of data points that are being collected on individuals daily is growing exponentially. Protecting this data will become increasingly difficult.

The Internet of Things will enable unprecedented levels of personality profiling. IoT-enabled devices will feed data firms with countless data points on users' personalities and emotional states.

AI-Generated Advertising

Artificial intelligence tools are being developed to automate copywriting and other parts of the advertising creative process. A computer algorithm can generate thousands of variants of a single ad with unique copy. Then, a feedback loop that measures user interaction could improve the algorithm iteratively.



Politicians no longer see you as a voter. You're a data point to them.

Rapid developments in artificial intelligence, big data, and social media are threatening to undermine the integrity of elections. Political campaigns will use unprecedented amounts of personal data to predict highly intimate details about you.

Your personality and emotions will be used against you as a political weapon. The future of political campaigning is hyper-personalized digital advertising that targets vulnerable citizens and manipulates the masses.



A Prediction of the Near Future

- 1 Smart devices collect data on you**
Your phone knows what you've been searching for, your social media account knows what your interests are, your car knows where you've been, your home assistant device can tell your mood based on the tone of your voice, etc.
- 2 Political consulting firms use psychographics to predict your personality**
Data firms collect data in any way they can (even illicitly), building a database of tens or hundreds of thousands of data points on you and every other voter in the U.S.
- 3 You are shown machine-generated, hyper-personalized ads**
Using the latest advances in machine learning, complex algorithms generate advertisements that are finely-tuned to your personality and emotional state, and designed to trigger individual prejudices.
- 4 You vote (or you don't)**
Countless political advertisements, spaced out over months, persuade you to vote for one candidate over another. Or a candidate's smear tactics may discourage you from voting at all.



Imminent Attack on Democracy

No public debate

Everyone deserves access to the same information as other voters. If the only political information that individuals receive is from personalized messages based on their pre-existing biases, then public debate is nearly impossible.



Lack of accountability

When political messages can be personalized to unique groups of people, then politicians will make different (even contradictory) pledges and promises based on their audience. Regulating and fact-checking political claims will become much more difficult.



A different type of politician

Political elections have always been greatly influenced by money, but the new era of digital analytics will give rich groups more power to influence elections. Politicians with the best ideas will lose out to politicians with the best data.



What Can I Do?

Understand the information that companies have collected on you and how it may be used to persuade you

- 1 Know what information Facebook and Google have collected about you
- 2 Learn what kinds of information data brokers have on you and how to opt out
- 3 Don't passively consume political ads; think about their content and delivery



Send an email to your Representative or Senator asking for updated federal election campaign laws

- 1 Advertising spending irregularities or misuses of personal data should be investigated
- 2 Political parties should be required to publish databases of every data point and targeting technique used



Support tech companies that are taking positive steps toward digital ethics

- 1 Dedication to data security, data privacy, and the democratization of artificial intelligence
- 2 Increasing transparency around social media advertising content and spending
- 3 Taking responsibility for the political information that is published on their social media platforms

Bibliography

Beard, John. "The Power & Peril of Big Data in Politics." *Wired*, 2014.
 Cambridge Analytica. "Cambridge Analytica." *Cambridge Analytica*, 2018.
 "Data Science: The Future of Marketing." *HubSpot*, 2019.
 "The Cambridge Analytica Scandal." *Wired*, 2018.
 "The Internet of Things (IoT) Will Change the Way We Live." *Wired*, 2019.
 "Psychographic Profiling: A New Frontier in Marketing." *HubSpot*, 2019.
 "The Future of Political Campaigning." *Wired*, 2019.

Artificial Intelligence Meets Advertising

Political candidates already collect thousands of data points on every voter. New artificial intelligence technologies will allow politicians to use personal data to create social media advertisements that are hyper-personalized to an individual's political views and prejudices.

Everything from the copy, the font, and the color scheme will be machine-generated to evoke a desired response from the recipient of the ad.

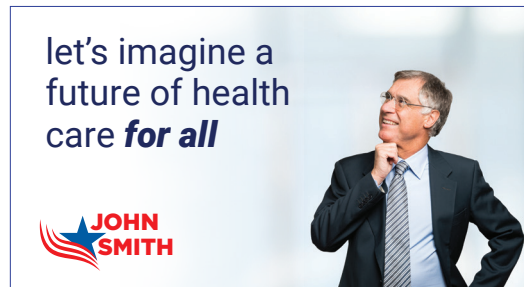
This is what it will look like:



Name: Karen Miller
Age: 52
Political party affiliation: Democratic
Occupation: Accountant
Religion: Catholic
Marital status: Married
Annual income: \$85k



Name: Samuel Ramos
Age: 31
Political party affiliation: Independent
Occupation: Web developer
Religion: Atheist
Marital status: Unmarried
Annual income: \$75k



Name: Ahmad Naser
Age: 63
Political party affiliation: Republican
Occupation: Psychiatrist
Religion: Muslim
Marital status: Divorced
Annual income: \$190k



Name: Katie Lin
Age: 24
Political party affiliation: Democratic
Occupation: Product designer
Religion: Buddhist
Marital status: Unmarried
Annual income: \$65k



Name: Jasmine Aria
Age: 36
Political party affiliation: Republican
Occupation: Retail manager
Religion: Atheist
Marital status: Married
Annual income: \$70k



Name: Tyler Bateman
Age: 19
Political party affiliation: Democratic
Occupation: Student
Religion: Christian
Marital status: Unmarried
Annual income: N/A

**Exhibit at the Thomas P. Kelly Student Art Gallery
(Presented at LMU's 11th Annual Undergraduate
Research Symposium)**



Interactive Component of the Exhibit

