

“The Role of Digital Marketing in Contemporary Political Campaigns”
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During the final, few weeks leading up the U.S. 2016 presidential election, Bloomberg published an in-depth article entitled “Inside the Trump Bunker, With Days to Go.” Journalists Joshua Green and Sasha Issenberg embedded themselves within the San Antonio, Texas-based digital operation, which was headed by Brad Parscale, a digital marketing professional with little experience in political campaigns.¹ Parscale described how the campaign used data analytics and targeting systems to send personalized messages through social media and other digital platforms to millions of individual voters in the so-called “battleground states.” “I always wonder why people in politics act like this stuff is so mystical,” he quipped. “It’s the same s---- we use in commercial, just has fancier names.”²

In the wake of the surprising (and to many, shocking) election results, journalists, scholars, and critics have probed the inner workings of the Trump digital campaign, raising many concerns about the manipulation of voters through “bots,” “dark posts,” and “psychometric targeting.”³ A recent report from the Oxford Internet Institute documented the campaign’s unorthodox and creative use of Twitter to set the news agenda and generate extensive coverage in the mainstream press, along with “citizen-created propaganda networks” that “spread propaganda, false information, and political attitudes.”⁴ But while many of the online operations associated with the Trump campaign may have crossed ethical boundaries, its overall digital strategy, along with most of the techniques it used, are emblematic of the increasingly central role that contemporary data analytics (so-called “Big Data”) and digital marketing are playing in campaigns and elections across the political spectrum. In the 2016 election cycle, data-driven digital tools were used by Democratic, Republican, and Libertarian candidates at the federal, state, and local levels, as well as by political action committees and other interest groups.⁵

Political campaigns have employed digital technologies for more than a decade, developing increasingly sophisticated tools and techniques during each election cycle, as “computational politics” have become standard operating procedure.⁶ However, the most recent U.S. election marked a critical turning point. By 2016 political practice had become fully integrated into a growing, global

commercial digital media and marketing ecosystem that had already transformed how corporations market their products and influence consumers. In the Big Data era, both brand marketing and political campaigns take full advantage of an elaborate and pervasive system that tracks and analyzes a complex range of behaviors, actions, and networked relationships taking place online and offline, and increasingly on mobile devices.⁷ This growing digital marketing ecosystem includes data brokers, ad technology and measurement companies, social media platforms, and other sectors of the digital marketing industry. By combining public data on individual voters with vast amounts of detailed consumer data from large commercial databases, political campaigns can amass detailed profiles that include one's finances, health concerns, race, ethnicity, shopping behavior, and geo-location, along with political interests and what a person reads online. A growing industry composed of data management platforms, marketing clouds, and other new services enables campaigns and candidates to reach and engage individuals with unprecedented precision. Personalized political messages can be tailored to a person's fears, concerns, and deep subconscious processes, and can be tested, refined, and altered in real time to maximize impact.⁸

The strategies, technologies, and tools of digital political marketing are more complex and far-reaching than anything we have seen before, with further innovations already underway. In the following pages, we describe recent developments in the digital marketing industry, highlighting its basic features, as well as the major marketing and targeting techniques currently in use in the contemporary commercial marketplace. We also document how data-driven digital marketing strategies and tools are being deployed in political campaigns, and we explore the implications of their use for democratic discourse and governance. Because most political digital operations take place below the radar, they are not fully understood by the public.⁹ Many of the techniques we describe in this paper have already raised concerns—over consumer privacy, discrimination, manipulation, and lack of transparency—in the commercial context.¹⁰ Their continued and growing role in elections raises even more serious issues that are fundamental to the future of democracy.

Marriage of Politics and Commerce

Since the mid-20th century, advertising has been an increasingly powerful and pervasive presence in political campaigns, as a growing cadre of ad agencies, public relations firms, and consultants perfected the use of opinion polls, focus groups, and psychographics to reach and influence voters through radio, television, direct mail, and other media outlets.¹¹ With the rise of the Internet, campaign operatives began to harness digital technologies and tools to mobilize voter turnout, engage young people, raise money, and support grassroots ground operations.¹² From Howard Dean's use of websites, blogs, and online meet-up tools during the 2004 Democratic primary, to Barack Obama's expansive digital re-election operations in the 2012, campaigns have become crucibles for innovation and experimentation.¹³ Before the 2016 election cycle both major political parties in the United States had developed large, sophisticated data operations. As scholar Daniel Kreiss explains, "contemporary campaigning has entered a new technology-intensive era where parties and campaigns have invested considerable resources in technology, digital media, data, and analytics to not only keep pace with these changes, but also actively shape technological contexts and define what twenty-first century citizenship looks like." This investment, he notes, has also included "knowledge transfer" from the commercial sector into the political arena.¹⁴

The digital technologies, tools, and techniques employed in contemporary political operations were developed, deployed, tested, and refined by the commercial sector.¹⁵ Since its origins in the mid-1990s, digital marketing has operated with a core business model that relies on continuous data collection and monitoring of individual online behavior patterns.¹⁶ This system emerged in the United States amid a political culture of minimal government interference, and within a prevailing *laissez-faire* ethos regarding the Internet and new technology: Only if allowed to grow unfettered by regulation would this vast new "network of networks" be able to reach its true potential as the great democratizer, connecting everyone to unlimited sources of information, and ushering in an unprecedented level of citizen participation and empowerment around the world.¹⁷ In the earliest

days of the “dot-com boom,” a strong political alliance was forged between the digital media companies and their partners in the advertising and media business, enabling the nascent industry to effectively ward off any attempts to restrain its business operations through privacy regulation or other public policies.¹⁸

Unfettered by government regulation and benefiting from lax oversight from much of the NGO community, the global data and digital marketing sectors have largely had a free hand to do whatever was necessary to reach and influence consumers more effectively.¹⁹ The advertising industry played a central role in shaping the operations of platforms and applications in the digital media ecosystem. Trade organizations worked relentlessly to ensure that technologies and practices that furthered the abilities of data marketing were firmly embedded in the technical development of devices and services. Individual companies and other associations, through their own research and development work, also contributed to advancing the capabilities of digital marketing. As a consequence, digital marketing is now well established and thriving, with expenditures reaching nearly \$72.5 billion in 2016 for the U.S. alone, and worldwide spending predicted to reach more than \$223 billion this year.²⁰

Ongoing innovations over the years have increased the capacity of data and digital marketing applications.²¹ Data collection, analysis, and targeting were further woven into the daily lives of consumers with the rise of social media platforms. Because of the unique role that social media play in users’ lives, these platforms are able to sweep up enormous amounts of information, including not only what users post about themselves, but also what is collected from them throughout their daily social interactions.²² Facebook has become the largest and most powerful social media company, now attracting more than two billion monthly users per month.²³

The integration of data collection and marketing has become deeper in the broadband and mobile Internet era, with the proliferation of digital platforms and devices, innovations in online measurement techniques, and the growth of data analytics.²⁴ An expanding arsenal of software and analytic tools is enhancing the ability of digital media companies and their advertisers to glean valuable insights from the oceans of data they generate.²⁵ Predictive analytics introduced an

expanded set of tools for scoring, rating, and categorizing individuals, based on an increasingly granular set of behavioral, demographic, and psychographic data.²⁶ These developments have created what some observers have called the “surveillance economy.”²⁷

Data-Driven Political Microtargeting

The data-driven digital marketing apparatus now in widespread use in the consumer arena has been fully extended into the political arena. Though political campaigns have employed microtargeting techniques during the last several election cycles, recent technological innovations and industry advances have created a much more robust system than what was in place in 2012.²⁸ The structure of the digital advertising industry has also undergone significant changes in the last few years, with extensive consolidation of powerful ad agencies and technology companies, new partnerships and alliances, and further integration of the commercial and political ad sectors.²⁹ A new generation of specialty firms has emerged, offering “one-stop-shopping” services to marketers or political campaigns seeking profile data and interactive advertising applications for targeting individuals.

U.S. digital marketers, led especially by both Google and Facebook, have helped popularize and spur the successful adoption of digital advertising platforms and applications in nearly every geographical location with an Internet connection or a link to a mobile device. Not surprisingly, these two leading platforms have also made generating revenues from political campaigns an important “vertical” category within their ad business.³⁰ Social media platforms have created a new, “identity-based” targeting paradigm. With users required to give their real names when they sign up as members, Facebook and other leading digital marketers boast that they can enable advertisers to target “real people, not cookies.”³¹ With the increasing penetration of mobile devices and the further extension of digital technologies into the retail marketplace, commercial marketers and political campaigns can find and target a consumer wherever she goes, following her “shopper journey,” and delivering messages at precise “micro-moments” when she

is deemed most susceptible to influence.³² Offline and online information (including “cookies” and mobile identifiers) can now be fully integrated, enhancing the ability of marketers to identify and reach an individual across multiple digital devices, including mobile phones and television. Through behavioral profiling and targeting, marketers can now create specific messages, precisely tailored and targeted to individual consumers

New types of digital advertising and marketing are being developed and implemented, with the goal of bypassing rational decision making in order to influence consumer emotions and behaviors more effectively. For example, so-called “native advertising”—a data-driven ad format where brand images and advertising are seamlessly woven into a website, mobile app, or social media—has become a highly popular and successful way of engaging individuals with personalized and entertaining content that is not perceived as advertising.³³ Advertising is also becoming more immersive, through the use of digital video, virtual reality, and gaming technologies. The industry is constantly testing all of these new tools, taking advantage of recent advances in psychology and neuroscience to maximize their impacts.³⁴ Many of these new forms of digital advertising are migrating to television, which is no longer a mass medium, but now a highly personal one where individuals can be identified and targeted through “addressable” technologies.

All of these developments have significantly enhanced the capacities of political campaigns to identify, reach, and interact with individual voters. Below we discuss this new digital political marketing system in more detail, highlighting its most important features and techniques, and providing illustrations of how they were employed by political campaigns during the 2016 election.

Data marketing clouds and data management platforms. For years, political campaigns have been able to combine public voter files with commercial data information from brokers, to develop detailed and comprehensive dossiers on all American voters.³⁵ With recent advances in the advertising technology and data industries, they now can now take advantage of a growing infrastructure of specialty firms offering more extensive resources for data mining and targeting voters. Among the new entities are data marketing clouds. Developed by well-

known companies such as Adobe, Oracle, Salesforce, Nielsen, and IBM, these clouds sell political data along with an exhaustive amount of detailed consumer information for each potential target, including, for example, credit card use, personal interests, consumption patterns, and TV viewing patterns. Salesforce's "third party marketplace" includes L2, which is billed as the "country's largest non-partisan processor and provider of enhanced registered voter data."³⁶ Salesforce cloud clients can also find political data products from many of its other partners, including Acxiom, Audience Partners, Alliant, Analytics IQ, Nielsen's eXelate, i360, Infogroup, Gfk MRI, Gravy Analytics, Decimal, and Factual (geo-location), TruSignal and others.³⁷ Oracle's data cloud, which partners with Facebook as well as 300 other companies, offers its clients an abundance of political targeting data.³⁸

Some of these massive cloud services also operate what has become a new and essential component for contemporary digital targeting—the Data Management Platform (DMP).³⁹ DMPs provide marketers with "centralized control of all of their audience and campaign data."⁴⁰ They do this by collecting and analyzing data about individuals from a wide variety of online and offline sources, including first-party data from a customer's own record, such as the use of a supermarket loyalty card, or their activities captured on a website, mobile phone, or wearable device; second-party data, information collected about a person by another company, such as an online publisher, and sold to others; and third-party data drawn from thousands of sources, comprising demographic, financial, and other data-broker information, including race, ethnicity, and presence of children.⁴¹ All of this information can be matched to create highly granular "target audience segments" and to identify and activate individuals "across third party ad networks and exchanges." DMPs also "measure with accuracy which campaigns perform the best across segments and channels to refine media buys and ad creative over time." DMPs are quickly becoming a critical tool for political campaigns.⁴² As scholar Colin Bennett has noted, the political parties in the U.S. and elsewhere have operated their own form of DMPs—"voter management platforms."⁴³

Cross-device targeting. DMPs, digital platforms, data brokers, and advertising technology companies have developed a number of ways to determine

who a person is, online and offline. Getting a complete picture of a person's persistent "identity" through an "identity-graph" has become a key strategy for successfully reaching consumers across their "omnichannel" experience (use of mobile, TV, streaming devices, etc.).⁴⁴ So-called omnichannel or "cross-device" targeting is necessary today in order to meet the challenge posed by the dominance of mobile phones as the key online device. Through a process of "cross-device recognition," marketers can determine if the same person who is on a social network is also using a personal computer and later watching video on a mobile phone. Marketers have also developed many ways to take advantage of very specific geo-location information (longitude and latitude data, for example) in order to understand and influence consumer behavior based on what an individual does at various locations throughout the day.

Through data "onboarding," a customer record that may contain a physical and email address is linked through various matching processes, associating it with what is believed to be that individual's online identification—cookies, IP addresses, and other persistent identifiers.⁴⁵ Data broker Acxiom's LiveRamp division, which now works on political campaigns, and is a leader in the development and sale of identity-based products and onboarding services, claims it can gather thousands of individual "signals" on individual consumers or voters in order to create highly personalized microtargeting segments. Its "data store" is an "identity-based commercial enablement layer" that helps political and other campaigns enhance their own information in order to identify and target individuals based on their data profiles.⁴⁶

Cross-device targeting is now a standard procedure for political initiatives and other campaigns. Voter files are uploaded into the onboarding process, enabling the campaigns to find their targets on mobile devices and at specific times when they may be more receptive to a message.⁴⁷ Such granularity of information also enables a more tailored advertisement—so-called "dynamic creative"—which can be changed over time to "deliver very specific messaging...."⁴⁸ Revolution Messaging, which worked for Bernie Sanders in 2016, used LiveRamp to onboard the membership records of a "large state education association" so the list could be

matched to the “desktop and mobile devices at the individual and household level.” The goal was to enable geo-based “precision ad targeting” campaigns that reached members when they were on Facebook, at their PC, on their mobile device or watching online video.⁴⁹ Democratic data group TargetSmart relies on the cross-device (TV, online, mobile, email, etc.) “Audience Engine” platform” recently developed by leading data broker Experian. Promising to deliver “real people,” Experian provides information about age, gender, marital status, occupation, income, and education, along with “predictive insights” from its Mosaic segmentation database, which has “more than 300 data factors to classify the makeup of Americans.” TargetSmart also relies on Experian for such services as its “Voter File 2.0,” which incorporates voter files and predictive modeling to target individuals and households in a “device-agnostic way.” As its promotional materials explain, “Voter File 2.0 offers one-to-one matching with 20 of the world’s largest media providers including Facebook, Google, Yahoo, MSN, Verizon, AOL, & Comcast.”⁵⁰

Political “adtech” services. The advertising technology industry has been steadily expanding its services to the political market, developing new subsidiaries dedicated to political data targeting. For example, Semcasting, which specializes in “IP” targeting, launched a “Political Data Suite” in 2016. According to its website, “nearly 100 percent of registered voters have been mapped to party, early voting, absentee voters, registered independent party preference, voter activism in Primaries and GOTV, as well as high-value donors and repeat donors.”⁵¹ Drawbridge, another adtech company, offered an “election and political campaigns” “playbook” to help engage in “political influencer identification based on enhanced demographic and interest-based targeting, political affinity, and prior voting history.” It also explained how to engage in “voter-centric, cross-device storytelling” and “hyper-local targeting...based on region, DMA, custom geofences” and more.⁵² Marketers using data provider Neustar can buy information in order to target individuals to sell ketchup, chewing gum, credit cards, fast-food restaurants or “Republicans, Democrats, independents...and on-the-fence prospective voters,” for example.⁵³ Global ad giant WPP launched Xaxis in 2011, billing it as “the world’s

largest database of unique individual profiles.” Expanding into political advertising in 2015, Xaxis integrated the personal and opinion data of 166 million Americans held by partner HaystaqDNA, claiming to create “an entirely new level of sophistication for political marketers.” Xaxis Politics enables “political candidates to reach voters with targeted messaging across display, mobile, online video, digital radio, connected TV and social media.” Xaxis Politics uses what WPP calls its “Turbine” Data Management Platform, “advanced real-time audience segmentation capabilities” that can reach individuals based on their device use, location, media habits, etc.⁵⁴

Programmatic advertising. The 2016 election saw the rise and widespread adoption of “programmatic advertising,” which became a key technique for identifying, reaching, and engaging individual voters with microtargeted messages. Programmatic advertising refers to new automated forms of ad buying and placement on digital media using computer programs (thus “programmatic”) and algorithmic processes to find and target a customer wherever she goes. The process can also involve real-time “auctions” that occur in milliseconds in order to “show an ad to a specific customer, in a specific context.”⁵⁵

The use of programmatic advertising was one of the major changes in political campaign digital operations between 2012 and 2016—“the first time in American History,” according to one ad company, “that such precise targeting has ever been made available at such great scale.”⁵⁶ Candidates were able to use the services of a growing list of companies, including Google, Rubicon, AOL, PubMatic, Appnexus and Criteo, that offered programmatic advertising platforms.⁵⁷ Individual voters were sold through several different mechanisms, including private deals made with publishers and “open exchanges” where anyone could bid. Leading political marketing companies such as Target Victory and DSPolitical offered “self-service” programmatic buying services, which allowed ad campaigns to have more direct access to individuals, deciding when and where to target them.⁵⁸ Another firm, L2—a key source for “enhanced voter, consumer and modeled issue data”—partnered with Acxiom’s LiveRamp to further integrate with third-party sources, making this information available via many of the most well-known programmatic

targeters.⁵⁹ A company called The Trade Desk employed “proprietary targeting algorithms” that promised political groups greater efficiency and effectiveness in engaging with supporters and avoiding “unlikely voters.”⁶⁰ Republican data firm Data Trust worked with leading programmatic ad company Rocket Fuel to take advantage of its “moment scoring” application, which uses “artificial intelligence and massive big data architecture to identify influential moments, regardless of channel or device.” The application promised political marketers that they could “distribute spend accordingly to the highest performing opportunities and reach voters at their most receptive moments of influence.”⁶¹

Lookalike modeling. The use of big data analytics enables marketers to acquire information about an individual without directly observing behavior or obtaining consent. They do this by “cloning” their “most valuable customers” in order to identify and target other prospective individuals for marketing purposes.⁶² The following is an explanation of the practice from eXelate, a data-marketing company owned by Nielsen:

Lookalike modeling is a process that draws on advertisers’ understanding of what the online behavior of their best customers entails. Once these characteristics are identified, third-party data providers then match these profiles or “personas” with likely effective, prospective audience data sets leveraged from pools of modeling data available online. Marketers can then approach these prospects with relevant digital messaging that achieves better reach and retargeting.⁶³

Stirista, a digital marketing firm that also serves the political world, offers lookalike modeling to identify people who are potential supporters and voters. The company claims it has matched 155 million voters to their “email addresses, online cookies, and social handles,” as well as “culture, religion, interests, political positions and hundreds of other data points to create rich, detailed voter profiles.”⁶⁴ Facebook offers a range of lookalike modeling tools through its “Lookalike Audiences” ad platform (see full Facebook discussion below). The Trump campaign was among those political operations that took advantage of this platform during the 2016 election cycle.⁶⁵

Mobile and geolocation targeting. Mobile devices continually send signals that enable advertisers (and others) to take advantage of an individual's location—through the phone's GPS (global positioning system), Wi-Fi, and Bluetooth communications. All of this can be done with increasing speed and efficiency. Online marketers have determined that, on average, people check their phones 150 times a day, and that 87 percent have such devices with them all day long, even while they sleep.⁶⁶ Through a host of new location-targeting technologies, consumers can now be identified and targeted wherever they go, while driving a car, pulling into a mall, or shopping in a store.⁶⁷ A complex and growing infrastructure of geolocation-based data-marketing services has emerged, with specialized mobile data firms, machine-learning technologies, measurement companies, and new technical standards to facilitate on-the-go targeting.⁶⁸ Google and Facebook, which often know the actual (“authenticated”) identity of their consumers, have expanded their use of location for ad targeting.⁶⁹

An entire industry has been developed to identify the characteristics of the places people visit—called “place data”—generating new insights to help companies more precisely reach their prospects.⁷⁰ Place data can include the characteristics of a particular neighborhood, such as its ethnic/racial mix and income level, along with customer information from loyalty programs and online tracking.⁷¹ Neighborhoods and communities across the country have been digitally “sliced and diced” through the use of mapping and database software, creating geo-data-rich profiles.⁷² As consumers enter specific areas they can pass through a “geo-fence”—an invisible online perimeter that triggers ads and coupons to be delivered via mobile devices.⁷³ The growing dominance of mobile devices, including the use of apps, has unleashed a flood of continuous “hyper-local” geo-data about where we go, when, and what we do.

The use of mobile targeting techniques and applications played a central role in the 2016 election cycle, with a growing number of specialists offering their services to campaign operatives. For example, L2 made its voter file, along with HaystaqDNA modeling data, available for mobile device targeting, offering granular profile data on voters, based on their interest in such contested topics as

Gun Laws, Gay Marriage, Voter Fraud, and School Choice, among others. Through “mobile device ID targeting,” the company explained, you can “directly place your ad into apps or mobile browsers.” Working with mobile marketing partner Sabio, L2 offered campaigns access to an expansive array of digital outlets, including “19 ad exchanges, 5.3 million apps, and millions of mobile Web sites.”⁷⁴ Geotargeting company Factual worked with another data marketer to offer its “Geopulse” services, which included “custom” maps “to enable precise targeting based on users’ voting districts. Mobile ads could be sent to prospects while they were using apps or attending campaign events, and could be filtered by issue and voter interest.”⁷⁵ Cross-device identification company Drawbridge offered campaigns the ability to engage in Zip+4 targeting and also set up geo-fences.⁷⁶ Smaller campaigns were reported to rely on this approach for 2016, given its more moderate costs.⁷⁷

Targeted TV advertising. Television advertising, which remains a linchpin of political campaign strategy, is undergoing a major transformation, as digital technologies and “addressable” set-top boxes have changed cable and broadcast TV into powerful microtargeting machines, capable of delivering the same kinds of granular, personalized advertising messages to individual voters that have become the hallmark of online marketing. Political campaigns are in the forefront of using set-top box “second-to-second viewing data,” amplified with other data sources, to deliver more precise ads. “In 2012, only Obama used political segments paired with TV data, but now everyone does that,” explained Carol Davidsen, vice president of political technology at comScore (who served as the Obama 2012 campaign’s director of integration and media analytics).⁷⁸ Last year, for example, Data Trust, which has developed “a Republican and conservative data ecosystem,” partnered with cable industry-allied data company FourthWall Media to merge its 190 million American voter datasets with the latter’s real-time viewer behavior data.⁷⁹ Deals between TV data viewing companies and organizations representing both Republican- and Democratic-leaning groups brought the “targeting capabilities of online advertising to TV ad buys...bringing what was once accessible only to large statewide or national campaigns to smaller, down-ballot candidates,” explained

AdAge.⁸⁰ comScore, which acquired set-top data company Rentrak in 2016, offered its own political product to campaigns. “By matching real voter registration files with actual viewing information from millions of TVs at the household level,” the company promised, “comScore helps political advertisers—from the most conservative to the most liberal—build more powerful advertising strategies, buy television advertising time with precision and more effectively reach their ideal viewers.”⁸¹ Media measurement company Nielsen has a division called “Political Solutions,” which provides “voter ratings” that marry voter data with “Nielsen TV, Audio, TV/Digital panels” and information on “party affiliation, voting behavior or political issues.” Voter registration data is also matched with other data analytics tools, including its Prizm segmentation service and Experian Simmons PoliticalPersonas.⁸²

Google and Facebook. The major social media platforms and search engines—principally Facebook and Google—now play a central role in political operations, becoming even more critical and important during the most recent election.⁸³ These two companies—widely regarded as operating an oligopoly in terms of digital ad revenues—are the two most influential media and technology companies in the world. They operate and tightly control a far-reaching data-driven advertising and marketing apparatus. Both companies serve the interests of political campaigns, offering the full spectrum of commercial digital marketing tools and techniques, along with specialized ad “products” designed for political use. Google, Facebook, and other major players in the digital marketing industry have also developed a global research infrastructure to allow them, and especially their major advertising clients, to continuously make improvements and measure their success reaching and influencing the public.⁸⁴

Google’s “campaign playbook” for political marketing explains that “[u]sing public voter files to target your ads on Google makes it easier than ever to reach the voters you most want.... You’ll be able to create a more effective campaign by first identifying specific voter groups by gender, age, location, and voting information. Knowing who your audience is—and what makes them tick—allows you to deliver more persuasive messages.” Google urges campaigns to use its digital ad technology

so they can “precisely reach audiences and target across devices. You can buy your ads in real time and deliver them when voters are most receptive to your message—like when they’re watching videos or reading articles. You’ll get access to millions of sites and apps through DoubleClick’s Ad Exchange and other ad exchanges, plus ad inventory on Facebook Exchange and Twitter.” Google has focused on its highly lucrative YouTube service—which also accepts programmatic advertising—as an important and effective way to reach and influence voters.⁸⁵

Over the last few years, Google has redefined how marketers can take advantage of its ability to capture real-time mobile and search data and to create “micro-moments” that marketers can use to their advantage. It now also offers political campaigns access to those “micro-moments when undecided voters become decided voters...,” especially those using mobile devices. Google’s political ad services research shows that, in 2016, mobile devices were used in nearly 60 percent of election-related searches. According to the company, the content producers (which it calls “Creators”) on YouTube were able to seize on these election micro-moments to influence the political opinions of potential voters 18-49.⁸⁶

Social media giant Facebook offers a spectrum of targeting opportunities specifically for political campaigns, enabling them to access its more than 162 million U.S. users and to target them individually by “age, gender, congressional district, and interests.” Facebook has its own online guide for political campaign marketing, which includes taking advantage of Instagram and its other products.⁸⁷ In a case study of its work for the “Keep the Promise III” political action committee supporting the presidential campaign of Sen. Ted Cruz (R-Texas), Facebook explains that it “used Facebook’s political ideology targeting, which is comprised of 5 segments that have been peer-reviewed and published in *American Political Science Review*.” The campaign also took advantage of Facebook’s “people-based targeting,” which merged voter files with Facebook data in order to target individuals through the platform’s political segmentation data analytics system. These political segments are based on a paper co-authored by a researcher from the “Facebook Data Science” division, who worked with an Ohio State University scholar to develop an “ideology

score” framework. Drawing from an extensive Facebook user data set, and analyzing “social ties and interaction online,” researchers were able to determine the political orientation of millions of users, who then could be targeted by political parties and candidates.⁸⁸

Facebook urges political campaigns to use all the social media platform tools it makes available to advertisers, including the ability to track individuals, capture their data through various “lead-generation” tactics, and target them by uploading voter files and other data.⁸⁹ For example, its “Custom Audiences” product enables marketers to upload their own data file so it can be matched and then targeted to Facebook users. Republican Senator Pat Toomey (Pennsylvania), who faced a potentially tough re-election campaign, “used a made for Facebook, audience-specific content strategy to significantly shift voter intent,” according to an online Facebook for Business case study. Toomey used Custom Audiences, which matched “8 first-party data files to Facebook.” Toomey’s campaign manager praised Facebook in the case study, stating that “Facebook allowed us to customize Senator Toomey’s message to individual voter groups, speaking to the specific issues that those voters cared about. That level of customization is not available through traditional TV advertising.”⁹⁰

Facebook also helped a conservative business group defeat a Democratic challenger, Deborah Ross, who was running for the U.S. Senate in North Carolina, by helping generate an attack video ad about her positions and character. According to Facebook’s case study, which was entitled, “Fueling Political Passion with Video,” the group’s ad firm developed a “Deb Ross Burn Book” video designed to “discourage people from voting for her.” The Burn Book video “used a storybook motif to share the various instances when Ross voted to raise taxes” and targeted the video on the mobile news feed of “300,000 moderate voters.”⁹¹

In its profile of the 2016 Bernie Sanders campaign, Facebook quotes one of the leaders of his digital campaign, who explains that “As Facebook has more active US voters than any other medium, we knew our advertising strategy here would be critical to getting this campaign off the ground.” The social media company reported that “the campaign took advantage of Facebook’s full suite of targeting and direct

response solutions to encourage people to join its email list.” The Sanders campaign worked directly with Facebook to “launch the first-ever politics-specific Canvas ad” (“an immersive mobile experience on Facebook for businesses to tell their stories and showcase their products”). The campaign also worked with the “Facebook Marketing Science team... to find out how much Facebook ads influenced voter behavior.” The custom “brand lift” measurement tool revealed that “Facebook ads in News Feed and Instagram ads combined effectively improved awareness and sentiment metrics. The second test also showed that mixing ad types (video, link and carousel) produced even better results.”⁹² Political campaigns also relied on Facebook’s marketing partners, such as giant data broker Acxiom.⁹³ Tapping into the growing role that so-called “influencers” play in promoting products, in 2015 Facebook launched a tool that enables campaigns to target “politically active users” by identifying and targeting those individuals who have “political pages” on the platform, are likely to engage with campaigns, and who “like and share” campaign content.⁹⁴

Psychographic, neuromarketing, and emotion-based targeting.

Psychographics, mood measurement, and emotional testing have been used by advertisers for many decades, and have also been a core strategy in political campaign advertising.⁹⁵ The digital advertising industry has developed these tools even further, taking advantage of advances in neuroscience, cognitive computing, data analytics, behavioral tracking, and other recent developments.⁹⁶ Granular-based messages that trigger a range of emotional and subconscious responses, to better “engage” with individuals and deepen relationships with commercial brands, have become part of the DNA of digital advertising. “You want to align the emotion of the moment with the tenor of the ad to create a natural connection,” explained WPP’s programmatic data ad targeting Xaxis last year. ⁹⁷ Facebook, Nielsen, and most leading brands use “neuromarketing” services worldwide, which utilize neuroscience tools to determine the emotional impact of advertising messages.⁹⁸ There is a growing field, recently promoted by Google, of “Emotion Analytics” that takes advantage of “new types of data and new tracking methods” to help

advertisers “understand the impact of campaigns—and their individual assets—on an emotional level....”⁹⁹

A digital industry consortium made up of three leading groups, including the Interactive Advertising Bureau, has identified ways the field should define and measure whether a person is “engaged” with advertising. They have defined it as “a spectrum of consumer advertising activities and experiences—cognitive, emotional and physical—that will have a positive impact on a Brand.” Among the methods they propose to measure changes in a person’s emotions are the use of surveys and biometric testing.¹⁰⁰

Such strategies and techniques, which have become commonplace in the advertising industry, have from time to time generated controversy, especially when otherwise clandestine practices are exposed to the public. For example, Facebook found itself in hot water earlier this year when it was revealed that researchers working with the company had gathered and analyzed the “mood shifts” and emotions of teenagers, to assist potential advertisers, by stealthily observing their behaviors and actions.¹⁰¹

Political operatives in the 2016 election cycle took full advantage of the latest psychological tools to promote their candidates. One of the most well publicized and controversial players was Cambridge Analytica (CA), a prominent data analytics and behavioral communications firm credited with helping Donald Trump win the election. CA has become the subject of much scrutiny and debate over many of its techniques, including the use of data analytics and psychometric modeling. As its CEO, Alexander Dix, explained to the *Washington Post* last fall, the key to its success was the use of a “five-factor personality model” aimed at determining “the personality of every single adult in the United States of America.”¹⁰² Labeled OCEAN, the model rated individuals based on five key traits: openness, conscientiousness, extroversion, agreeableness, and neuroticism. In a presentation last year, Dix described the three major components that make up CA’s approach to targeting the electorate: “Behavioral Science, Data Science and Addressable Ad Tech.” “Big Data,” he explained, should also be viewed in three dimensions. It includes a mix of what he described as “Factual” information, including age, gender,

ethnicity, religion, education, income, socio-economic status; “Attitudinal” (psychographic) data, including information on lifestyle, buying patterns, political engagement, and other “consumer” data; along with “Personality” (behavioral) assessments that incorporated the OCEAN scale and ways to define how a person reacts to “persuasion”—including one’s relationship to fear, authority, etc. At the foundation of Dix’s Big Data formulation were the digital data, voter history, and marketing resources from leading companies, including Acxiom, Experian, Nielsen, GOP firm Data Trust, Aristotle, L2, Infogroup, and Facebook.¹⁰³ From these sources, the firm was able to develop an “internal database with thousands of data points per person.” The research also identified key segments that were considered “persuadable,” and shaped the advertising content placed “across multiple digital channels (with the most effective ads also appearing on television).”¹⁰⁴ The strategy was based on developing messages that were tailored to the vulnerabilities of individual voters. As Dix explained, in order to target a “highly neurotic and conscientious audience,” for example, the campaign would need a message that “is rational and fear based or emotionally based.”¹⁰⁵

CA’s work was sufficiently convincing to the leading advertising industry research organization, ARF, that it honored the firm with a “Gold” award in 2017 under its “Big Data” category, highlighting its work in identifying “an unexpected group of undecided Democratic women” who were then targeted with video ads by a political action committee (with funding from CA backer Robert Mercer) to support the Trump campaign.¹⁰⁶

Digital voter suppression. In the direct-marketing world, companies have long been able to purge, or “suppress,” individuals from mailing lists, including those who have already purchased the product being advertised, or who are otherwise not appropriate recipients for the message. In the lingo of the marketing industry, this process is often called “audience suppression.” Political operatives may use the technique in order to ensure that a Democratic pitch is not sent to a Republican voter, or vice versa.¹⁰⁷ Digital advertising enables marketers to make narrowly tailored decisions about how to treat each individual differently. As adtech firm LiveRamp, explains, “This principle of selectivity is now guiding digital

marketers as they strive for accurate, relevant personalization in their people-based marketing efforts.”¹⁰⁸ To the extent that highly detailed profiles of consumers often include data about race, gender, social class, and other sensitive attributes, audience suppression may mean that an African American is not delivered an ad for a luxury car, but will be targeted with messaging promoting a payday loan.

The Trump campaign employed these same “people-based” personalized digital marketing tactics to identify specific voters who were not supporters of Trump in the first place, and to target them with psychographic messaging designed to discourage them from voting. Campaign operatives openly labeled this effort “voter suppression.”¹⁰⁹ The use of this particular term appears to marry a practice in contemporary digital marketing with the decades-old strategy used to put up barriers, discourage, or otherwise undermine the motivation or ability of voters—principally African American and other minority groups—to go to the polls.¹¹⁰ The conflation of these two concepts may well have been purposeful. In the 1920s, the Ku Klux Klan and other white supremacist groups organized their members to monitor polling places—as a way of intimidating and discouraging turnout.¹¹¹ Donald Trump told his supporters to use similar tactics by visiting the polls in neighborhoods outside of their communities and monitoring them for any irregular activity.¹¹² The campaign’s digital strategy was a parallel effort. Taking full advantage of the precise targeting of individuals available on social media and other marketing platforms, campaign operatives engaged in what they referred to as “three major voter suppression operations” aimed at “idealistic white liberals, young women and African Americans.”¹¹³ Bloomberg quoted an unnamed source that the “Trump campaign was explicitly hoping to suppress turnout among black voters this year,” by targeting those who supported Hillary Clinton ads that included a 1996 video of Hillary Clinton speaking about “super-predators,” linking her to unpopular policies developed during the Bill Clinton administration. Facebook was a primary vehicle for this effort. The voter suppression operations used standard Facebook advertising tools, including “Custom Audiences” and so-called “dark posts”—“nonpublic paid posts shown only to the Facebook users that Trump chose”

with personalized negative messages. The campaign spent \$150 million for its overall ad campaign on Facebook and Instagram.¹¹⁴

Discussion

Digital media technologies have made important positive contributions to the vibrancy of the political sphere, including greatly expanding sources of news and information, significantly increasing opportunities for citizen participation, and empowering people from diverse backgrounds to form coalitions and influence policy. The same tools developed for digital marketing have also helped political campaigns substantially improve voter engagement, enhance their capacities for “small donor” fundraising, and more efficiently generate turnout.¹¹⁵ However, as this paper has documented, the increasingly central role of commercial digital marketing in contemporary political campaigns—which reached a high mark in 2016—is reshaping modern-day politics in fundamental ways. Data-driven political campaign practices have already begun to alter relationships among candidates, parties, voters, and the media. Yet, for the most part, these practices are not well understood by the public.

The recent controversies over dark posts, online voter-suppression tactics, and psychographic profiling can help shed light on some of these practices and their connection to broader trends in the digital media and marketing ecosystem. For example, “fake news” has a direct relationship to programmatic advertising, the automated system of “intelligent” buying and selling of individuals and groups.¹¹⁶ Now widely operating throughout the world through many companies, programmatic advertising generates revenues for marketers big and small. Nearly anyone with even a modest budget can plug into the “self-serve” interface to target individuals on the sites they visit. These impersonal algorithmic machines are focused primarily on finding and targeting individual consumers wherever they are, often with little regard for the content where the ads may appear.¹¹⁷ As a consequence, in the middle of the 2016 election, many companies found themselves with ads placed on “sites featuring pornography, pirated content, fake news, videos supporting terrorists, or outlets whose traffic is artificially generated by computer

programs,” noted the *Wall Street Journal*.¹¹⁸ As a major U.S. publisher explained in trade publication *Advertising Age*,

Programmatic’s golden promise was allowing advertisers to efficiently buy targeted, quality, ad placements at the best price, and publishers to sell available space to the highest bidders.... What was supposed to be a tech-driven quality guarantee became, in some instances, a “race to the bottom” to make as much money as possible across a complex daisy chain of partners. With billions of impressions bought and sold every month, it is impossible to keep track of where ads appear, so “fake news” sites proliferated. Shady publishers can put up new sites every day, so even if an exchange or bidding platform identifies one site as suspect, another can spring up.¹¹⁹

Public criticism from news organizations and civil society groups, along with a major backlash by leading global advertisers, led to several initiatives currently underway to place safeguards for automated digital marketing.¹²⁰ For example, earlier this year, several major brands pulled their ads from YouTube. In an effort to ensure “brand safety,” leading global advertisers and trade associations demanded changes in how Google, Facebook and others conduct their data and advertising technology operations. As a consequence, new measures have been introduced to enable companies to more closely monitor and control where their ads are placed.¹²¹

The voter-suppression tactics used by the Trump campaign reflect commonplace digital practices that target individual consumers based on factors such as race, ethnicity, and social-economic status. Both Google and Facebook, among many others, offer opportunities for marketers to target communities of color.¹²² Civil rights groups, such as Color of Change, have had some success in getting companies to change their practices. However, for the most part, the digital marketing industry has not been held sufficiently accountable for its use of race and ethnicity in data marketing products, and there is a need for much broader, industry-wide policies.¹²³ These safeguards could, in turn, help ensure that political campaigns are not able to engage in some of the particularly disturbing profiling and targeting practices that were in evidence in the last election. Scholars, civil society advocates, and policymakers have also raised concerns about the role that Big Data algorithmic practices can play in promoting unfair or discriminatory outcomes.

Ways to ensure “algorithmic accountability,” such as transparency, are a growing subject of focus by both academia and the public sector—including as it applies to elections.¹²⁴

Contemporary digital marketing practices have raised serious issues about consumer privacy over the years.¹²⁵ When applied to the political arena, where political information about individuals is only one of thousands of highly sensitive data points collected and analyzed by the modern machinery of data analytics and targeting, the risks are even greater. Yet, in the United States, very little has been done in terms of public policy to provide any significant protections. In contrast to the European Union, where privacy is encoded in law as a fundamental right, privacy regulation in the U.S. is much weaker.¹²⁶ The U.S. is one of the only developed countries without a general privacy law. Although the Federal Trade Commission is the key government agency with responsibility to protect consumer privacy online, the agency lacks the statutory power to develop, implement, and enforce broad privacy rules.¹²⁷ The data industry largely understands that it can ignore the agency, as long as companies engage in “notice-and-choice” practices that require them to disclose—even obliquely—through their privacy policies what they do. When the U.S. Federal Communications Commission (FCC), which does have rulemaking authority, issued fairly strong privacy rules last fall to govern the data practices of broadband Internet Service Providers (ISPs), the Republican majority in Congress quickly rescinded the rules.¹²⁸ As a consequence, except in specific areas, such as children’s privacy, consumers in the U.S. enjoy no significant data protection in the commercial marketplace.

In the political arena, there is even less protection for U.S. citizens. As legal scholar Ira S. Rubenstein explains, “the collection, use and transfer of voter data face almost no regulation.” The First Amendment plays a crucial role in this regard, allowing the use of political data as a protected form of speech. And the Federal Election Commission (FEC), which might play a role in ensuring greater transparency and accountability of digital data practices, is “dysfunctional.”¹²⁹ As Stanford University scholar Nathaniel Persily puts it, “The Internet remains an

unregulated Wild West when it comes to political communication, and it almost seems inevitable that it will remain so.”¹³⁰

Prospects for effective regulation of data practices are brighter in Europe. For example, the impending implementation of the General Data Protection Regulation (GDPR) in 2018 holds promise for some policies that could affect the operations of U.S. global companies and, in turn, perhaps their practices in the policy arena as well. In the UK, an inquiry conducted by the Information Commissioner Office (ICO)—that country’s data protection authority—on “the data protection risks arising from the use of data analytics, including for political purposes” could result in greater scrutiny and regulation abroad.¹³¹ However, while there has been robust examination of the data protection and competition issues related to American digital media companies, insufficient attention has been given to the broader core business objectives driving the industry’s global growth.¹³²

The news media have traditionally played a critical watchdog role in monitoring campaigns and elections, a function that will be increasingly important in the future. For example, newspapers, along with nonprofits and think tanks, critique and “fact check” political advertising, calling out candidates or their surrogates when they engage in false or misleading communications.¹³³ However, as more and more political messaging is personalized and targeted at precise “micro-moments” and specific individuals through social media, mobile, or other digital platforms, there is no practical way for reporters or observers to access the content of the messages. The task of monitoring the complex and sophisticated processes of digital political communication is even more challenging. While there were some important and influential investigative journalism efforts during the most recent U.S. presidential campaign, most of the hidden practices of contemporary politics operate completely out of view, and are generally not adequately covered by the mainstream media. Cutbacks in newsroom budgets, ironically due to the loss of revenue connected to the success of the digital ad sector, also play a role in weakening the ability of the “Third Estate” to hold political campaigns accountable. Finally, news media institutions face their own ethical challenge in criticizing digital

marketing practices, since they are also using programmatic advertising and other data-related techniques.¹³⁴

The campaign strategies and practices we have documented in this paper will continue to evolve in coming elections, most likely with little oversight, transparency, or public accountability. The digital media and marketing industry will continue its research and development efforts, with an intense focus on harnessing the capabilities of new technologies, such as artificial intelligence, virtual reality, and cognitive computing, for advertising purposes. Advertising agencies are already applying some of these advances to the political field.¹³⁵ Academic scholars and civil society organizations will need to keep a close watch on all these developments, in order to understand fully how these digital practices operate as a system, and how they are influencing the political process. We also have a critical opportunity to develop public policies, best practices, and other interventions to ensure that digital technology enhances democratic institutions, without undermining their fundamental goals.

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