DEVELOPING TECHNOLOGIES OF CONTROL: PRODUCING POLITICAL PARTICIPATION IN ONLINE ELECTORAL CAMPAIGNING*

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ABSTRACT

This paper analyzes the new media managerial practices and technologies of control used by the 2008 Barack Obama campaign for president. Campaigns have long sought to generate online citizen participation in fundraising, messaging, and fieldwork. To help secure these fiscal and human resources, the Obama campaign developed a set of management techniques and data and analytic practices designed to increase the allocative efficiency of resources and probabilistically produce desired actions among supporters. Through in-depth interviews with more than twenty staffers working with new media on the campaign, this paper analyzes the New Media Division’s development of what I call a ‘computational management’ style, or the delegation of managerial, allocative, messaging, and design decisions to analysis of user actions made visible in the form of data as they interacted with the campaign’s media. It also analyzes in-depth two technologies of control designed to probabilistically produce user actions: website optimization and online advertising. While these practices and tools did not on their own produce the extraordinary mobilization around the campaign, they helped translate it into staple electoral resources: money, messages, and votes.
Barack Obama spoke to the nation for the first time as president-elect at the site where forty years earlier police and activists clashed during the Vietnam War protests at the Democratic National Convention. Obama attributed his historic victory to “the millions of Americans who volunteered, and organized, and proved that more than two centuries later, a government of the people, by the people and for the people has not perished from this Earth.” During the course of the long primary and general election season, the president defined himself, his campaign, and his leadership style in terms of empowering citizens to bring about change in Washington.

In many journalistic (Dickinson, 2008; Exley, 2008; Vargas, 2010) and scholarly accounts (Love and Musikawong, 2009), the campaign appears more as a bottom-up social movement than a traditional electoral effort. Indeed, Obama’s campaign appeared to fulfill the promise of participatory democracy fought for by the activists of an earlier era. Many scholars have rightly pointed to the role of an extraordinary array of online campaign tools and social media platforms such as Facebook in providing citizens with an unprecedented number of opportunities to get involved in the campaign (Burch, 2009; Carty, 2011; Cogburn, Espinoza-Vasquez, 2011; Harris, Moffitt, and Squires, 2010; Levenshus, 2010; Lipton, 2008; Talbot, 2008). Others note how these technologies offered the campaign new means to target particular groups of voters, and even individuals, with messages delivered through email and online advertising that both spoke to their concerns and spurred them to action (Kreiss and Howard, 2010; Smith and Smith, 2010). The Obama campaign did mobilize extraordinarily large numbers of citizens to participate in electoral activities. Millions of citizens knocked on doors and made phone calls from field offices for Obama. Millions more made small donations to the candidate online throughout the campaign, remaining well below the legal limits. Meanwhile, the legions of supporters organizing for Obama on Facebook and posting their own videos for the candidate on
YouTube captured the imagination of many with faith in the idea that the internet empowered ordinary citizens to, as the famous slogan of the failed Dean campaign four years prior proclaimed, “take our country back.” Over two million citizens set-up accounts on the campaign’s social networking platform, My.BarackObama.com, where they used tools to independently host tens of thousands of volunteer and fundraising events for Obama and set up over 35,000 geographic and affinity-based supporter groups. Supporters made over thirty million phone calls to voters using an online calling tool the campaign launched during the general election. Taken together, these efforts rivaled the extraordinarily high levels of civic participation common during the era of strong party politics and torchlight parades (Schudson, 1998).

The citizenry’s collective response to Obama was indeed extraordinary. As impressive were the technologies such as social networking platforms and email that both enabled citizens to gather around the idea of Obama and ‘change’ and helped staffers to channel and leverage their collective action. These technologies, and practices for using them, have a history. In the years after the 2004 elections, a new set of what I call ‘infrastructural intermediaries’ (Kreiss, forthcoming) took shape that extended the innovations of the cycle to produce and formalize new knowledges, tools, and practices of online campaigning. The internet staffers of many failed presidential campaigns, particularly those of Howard Dean and Wesley Clark, found new professional opportunities with the candidates and advocacy organizations looking for help navigating the seemingly bold new world of online politics. To capitalize on these opportunities, these former political amateurs founded and joined an extraordinary range of political consultancies, training organizations, practitioner forums, and conferences oriented around the theory and practice of online politics. Taken together, these intermediaries tied together much of
the extant knowledge, tools, practice, and culture of online campaigning to address the concrete problems of control and capacity campaigns encountered during the 2004 cycle.

As a result, in 2008 the Obama campaign had much of the sociotechnical infrastructure in place to help control and structure the mobilization taking shape around the Obama campaign. ‘Control’ is not deterministic, but probabilistic (Beniger, 1986) as the campaign attempted to coordinate the work of supporters outside of formal management structures through data management and analytic practices. As Michael Slaby (personal communication, August 18, 2010), the 2008 campaign’s Chief Technology Officer put it, “we didn’t have to generate desire very often. We were about, we had to capture and empower interest and desire...We made intelligent decisions that kept it growing but I don’t’ think anybody can really claim like we started something.” In other words, as the collective outpouring around the candidate took shape, the campaign had much of the staff, practice, and tools in place to convene and harness it for electoral ends.

These decisions were ‘intelligent’ because they were based on what I call the ‘computational management’ practices of the campaign’s New Media Division. To help staffers guide supporters towards the work the campaign needed accomplished based on its electoral goals, the New Media Division of the campaign delegated key managerial, allocative, and design decisions to the results of rigorous and ongoing data analysis. On one level, computational management was as an internal tool that staffers used to make staffing and budgetary decisions. The Division routinely evaluated questions such as whether hiring additional email or online advertising staffers would net more money or volunteers for the campaign. This is one aspect of how the Division calculated the “return on investment” (ROI) for each additional dollar invested in a domain of new media practice versus other potential expenditures. This rigorous analysis of
the ROI of every new media expenditure enabled the Division to be efficient both in its own work and demonstrate its effectiveness to the larger campaign to garner resources. The Division’s computational management practices enabled staffers to report exactly what acquiring an email address cost the campaign and its value and used these figures to justify their expenditures on staff and technology. Staffers cited with pride how the New Media Division was actually in the black, profiting the campaign. Even more, these computational management practices had predictive power, enabling staffers to anticipate resource flows down to the minute.

Staffers also used data as an external management tool to generate the actions they desired of supporters. As supporters interacted with the campaign’s media, data rendered them visible to staffers. Transforming user actions into data enabled staffers to create abstract representations of supporters that they then used to produce resources for the campaign. For example, the campaign engaged in what in the industry is known as “A/B testing” to optimize its webpage design. Prevalent in commercial settings, A/B testing helped the campaign find the optimal design and content of its webpages and online advertising, targeted to specific supporters, that increased the probability of actions the campaign desired, such as contributions. The campaign continually ran experimental trials of this content to select the one that was most optimal for probabilistically increasing ‘click through’ rates. The actions staffers sought to induce were contingent upon both electoral strategy and the characteristics of the targeted individual. In what is a quintessential technology of probabilistic control, the campaign generally knew what to expect in terms of resources from each visitor to its website and online advertisements and the optimal targeting and design to achieve it.

To document the development of ‘computational management’ and technologies of control by the campaign, this article proceeds in three parts. First, I discuss my methods for this
study. I then turn to analysis of the campaign’s computational management style and look closely at two technologies of control deployed on the campaign: website optimization and online advertising. Finally, I conclude with a discussion of these findings and their implications for conceptions of democracy and new media.

METHODS

Despite many works that have looked at the 2008 Obama campaign from the user and citizen perspective, very little is known about how the campaign organized its new media practice. To understand the campaign from the perspective of the staffers responsible for its organization, I interviewed a number of individuals who worked in various roles related to new media on the 2008 Obama campaign. I purposively selected interviewees on the basis of their positions in the campaign organization as revealed by Federal Election Commission filings. I also asked these individuals for recommendations as to whom else to contact. These activities netted me a sample size of twenty-one, including fifteen former staffers and six vendors to the campaign. Senior staff participants included the campaign’s Chief Technology Officer and Director of the New Media Division. Within the New Media Division of the campaign, I interviewed the heads of a number of departments including the Director of Internet Organizing, Director of Internet Advertising, Director of Analytics, Design Director, Blog Director, and Director of New Media - Battleground States. I also interviewed a number of lower-level staffers working within these departments, as well as New Media Division staffers who served as liaisons to the Communications, Field, Finance, and Technology Divisions of the campaign. With few exceptions, most of these staffers joined the campaign during the primaries and stayed on through the general election. In addition to these staffers, I interviewed a number of
individuals who served as vendors to the campaign providing a range of technology, data, and consulting services, including Blue State Digital and Voter Activation Network.

Interviews were open-ended, semi-structured, and lasted between one and four hours, with the average interview being just over two hours. I conducted these interviews in person, on the telephone, and through internet video chat services such as Skype. I recorded and transcribed all of these interviews for accuracy purposes. All interviews were ‘on-the-record,’ although participants could declare any statement ‘off-the-record’ (i.e.: not to be reported), ‘not for attribution’ (i.e.: directly quoted but anonymous), or ‘on background’ (i.e.: not directly quoted) at their discretion. Statements being made ‘off-the-record’ and ‘on background’ happened rarely in practice.

**COMPUTATIONAL MANAGEMENT**

The Obama campaign organized itself around the idea that the candidate was a transformational figure in electoral politics. Rhetorical constructions of ‘hope’ and ‘change’ served as empty vessels for the citizenry to invest their own dreams in, as was the young outsider candidate. For Karin Knorr-Cetina (2008, 132), “charismatic mobilization” drove the Obama campaign, as demonstrated in the extraordinary willingness of his supporters to collectively invest their faith in the unknown candidate as a transformative leader. Meanwhile, the digital technologies the campaign used, Knorr-Cetina (ibid., 135) argues, were “technologies of attraction,” electronic instruments through which Obama continually convened and communed with his supporters.

Underneath nearly all the campaign’s new media work lay a sophisticated managerial style, data backend, and analytic practices that furthered what the campaign’s New Media
Ombudsman Gray Brooks (personal communication, June 29, 2010) described as the Division’s goal to create “a customized, highly productive individual relationship with every person in the country.” The aim of this relationship was to move supporters up what one email staffer described as a “ladder of involvement” (Will Bunnett, personal communication, April 9, 2009). This “ladder” was a computationally-mapped general progression from the first initial attempt to persuade a voter to join the email list, to fashioning a supporter into a donor and then a repeating contributor, and finally to more complex forms of mobilization, from making phone calls to voters online to traveling to a swing state or becoming a precinct captain.

To move supporters in this direction, new media staffers used data and analytics extensively in their work both inside and outside the organization. Staffers rigorously gathered and analyzed information on the use of all its communications media. What staffers learned, meanwhile, was a key determinant of organizational decision making. Data lay behind decisions of where to allocate resources, how to staff and organize new media work, and grounded claims for resources from the larger campaign organization and the authority of the Division. The Division’s leadership conducted rigorous analysis of the returns on investment that every new media expenditure produced, from dollars to voter registrations, to both have efficiency in its own work and garner organizational resources. The Division could do this because, unlike other media, online media “is a closed loop, you can measure from displays to clicked versions with no, basically zero externality, because it happens so accurately -- the measurement is enough (Michael Slaby, personal communication, August 18, 2010).”

This emphasis on, and what many staffers described as an ‘obsession’ with, data and analytics resulted in the computational management style of organizational decision making within the New Media Division. This use of data and analytics for allocating organizational
resources and communicating with supporters was a qualitative change in the management of new media campaign work, akin to changes in the commercial sector.\textsuperscript{1} As a result of the development of much more sophisticated data gathering, storage, and analytic tools and practices, the Division was able to project its revenue flows and adjust its allocations down to the minute, enabling it to more effectively control its operations. Through data and analytics, the Division helped translate the mobilization around Obama’s candidacy into millions of additional volunteers and dollars by increasing the probability that supporters would take the actions the campaign wanted them to take. These millions were highly consequential for the campaign. As Slaby (personal communication, August 18, 2008), notes, generating higher conversion rates over the lifetime of donors meant significantly more resources for the campaign:

That is worth 57 million dollars - right, how far did you go, 30\%-40\% conversion rate based on the lifetime value of those people.... Its 57 million dollars. That is more than entire state budgets during the general election. The Florida state budget was like 35 [million]. We basically paid for Florida and Ohio by fixing the optimization.

\textit{Data and Management}

New Media Division staffers recount that the emphasis on data and analytics began in the summer of 2007, when Joe Rospars, the New Media Director of the campaign, began discussing the possibility that his team would be able to calculate the returns on investment (ROI) of nearly all the Division’s activities by generating more and better data. The first stage in the process was having clearly defined and measurable conversion goals for all of the Division’s new media work. The Division had to identify what actions it needed performed and then link these to the various ways staffers communicated with supporters. In December of 2007, Dan Siroker joined the campaign as a volunteer after taking a leave of absence from Google, where he was an engineer working on the operating system Chrome. Siroker, new to politics, subsequently joined
the campaign full time as the Director of Analytics during the general election. When Siroker (personal communication, September 1, 2010) arrived in December, he found that:

> New media in the campaign had very clear conversion goals, very clear goals for our operations. It was to get people to sign up for e-mail, get people to donate, get people to register to vote, get people to volunteer, and at the end of the day get people to vote and so all of those things were very clear, very measurable, very concrete objectives.”

The campaign then measured all of its returns on investment from the perspective of meeting these objectives. Generating ROIs, in turn, helped the Division allocate its scarce resources. Rospars developed and implemented a system wherein the Division was constanty assessing ROIs for each of its domains, comparing where spending additional dollars would best further its overall progress towards these electoral goals. This involved a host of complicated calculations. For example, the Division used this approach in its attempt to register voters through the ‘Vote for Change’ application developed during the general election. The Division started out by assessing the campaign’s priorities for voter registrations, which involved a number of state and demographic targets laid out in the field plan. The Division than assessed the online tools at its disposal to help meet this goal of registering voters, from emails, online advertising, and polling place lookups to running ‘vote by mail’ online programs. The key was the attempt to find the optimal way of reaching each different category of voter so staffers could spend their resources accordingly. To do so, the campaign ran a series of experimental trials, such as assessing whether an individual responding to an online advertisement or email actually registered to vote. Staffers did so by matching the names of individuals who signed up online to published lists of new voters issued by many secretaries of state. Where matching names was not possible, the campaign also looked for other signs of engagement, for instance whether individuals using a polling place lookup also donated to the campaign.

These data practices not only shaped how the Division allocated resources and hired staff,
they also defined the daily work of Division staffers. The Division’s leadership used the ROIs to make staffing decisions, such as hiring staffers for email or advertising depending on what was most effective for particular projects. This approach to rigorously setting goals and generating data, in turn, filtered down to the decisions that staffers made on a routine, daily basis. Staffers, for instance, constantly tracked their expenditures and evaluated them against the returns they were generating for the campaign. As Design Director Scott Thomas (personal communication, August 3, 2010) explained:

That came from everything from banner ads down to the printer. I remember buying the printer, I was like here this is how we are going to have a return on investment. Instead of paying $100 for podium signs we are going to pay about $10 in materials so we can print 10 podium signs for what we are paying for one. That pays the printer out in about three or four times, and that is why we should do it. So I mean everything is about how do we make a return on investment if I am going to spend my time doing something how can I show that my time is now valuable and how do I show that my time is actually making money.

The New Media Division also used its detailed metrics as tools to achieve organizational resources. The Division demonstrated the ‘returns’ generated on nearly every dollar of its Divisional budget. For a money conscious campaign devoted to running a large field operation, the Division’s ability to demonstrate its value was crucial to securing organizational resources. In asking for additional staffers, for example, Division staffers presented the leadership with figures demonstrating that they would pay for themselves, and even had developed estimates of how much these new staffers would profit the campaign. The ability to demonstrate these returns was particularly important given that Division staffers felt that even though new media was raising a lot of money, it did not always go back to the division. As a number of staffers noted, traditional media advertising absorbed the bulk of the resources of the campaign - even as they lacked the metrics that would demonstrate their effectiveness. Slaby (personal communication), for example, contrasts the New Media Division’s work work that of traditional advertising:
I can tell you the exact dollar amount to the penny of what a new e-mail address would net for the campaign less the cost of acquiring it - to the penny. We went well beyond the point of optimizing our online buying. We paid for the people that we acquired, and before we had to write their checks we affirmed that they would pay for themselves.

Optimizing Content and Design

The New Media Division entwined rhetoric, design, and quantification in using website optimization as a technology of control. As the campaign watched “people click and move from space to space” (Thomas, personal communication) through the data generated on their online actions, staffers learned the most effective content and design in terms of money, email signups, and volunteer hours. These data practices required a significant amount of organizational capacity given the degree of complexity in processing of ROI calculations. Depending on time and resources, staffers only tested content and design for optimal results once, such as when a new application launched. The standard practice, however, was to run more complicated analytics. The campaign’s email operations, for example, routinely generated thirty day fundraising metrics to figure out optimal messaging from the time an individual signed up for the email list to when they made a donation.

In other words, at every step in the process, staffers measured user engagement and refined their messaging and approach accordingly. For example, staffers tested nearly all imaginable content and design in emails through A/B testing, which entails measuring response rates of a control email against a host of different manipulations, to find the optimal content for different categories of user. Staffers segmented the 13 million person email list based on the extensive information it had on its supporters, from demographic and geographic information collected at sign-up to the history of interactions with the campaign. At times, segmentation was
more complex, for example, sending a particular email to supporters of a particular race residing in an early primary state, but suppressing donors that have already given more than $100.

The team then continually ran numbers on response trends through the BSD database for online contributions based on differences in small differences content and came up with new manipulations to be tested. For example, the campaign sent hundreds of emails over the course of the campaign to each supporter. The cast of characters signing off on these emails - from Michelle and Barack Obama to David Plouffe and surrogates at the state and federal level - were all tested in terms of the effectiveness of appeals, as were the subject lines, format, and content of these emails. Staffers also tested whether hyperlinks versus urls, and their respective order on the page, resulted in more contributions. Staffers did not, however, personalize these emails beyond the name of supporters and donation amounts (in large part because any additional tailoring had to be performed manually; in other words, the campaign could not generate tailored paragraphs in emails to supporters.) The Division even tested optimal sequences of emails, down to a 72-hour basis. For example, on the first day a supporter who just signed up for the email list might receive a state-specific email detailing all the programs the campaign was running. On the second, it may be a general fundraising ask. On the third, it might involve a fundraising ask that had a donor offer to match the donation. Depending on the response, or lack thereof, to this sequence, the Division then knew what to send next. The fourth email, for instance, might offer merchandise or a different incentive.

While the Division’s email team was segmenting its lists and testing design from early on, the campaign did not develop full scale analytic testing on its web design until 2008. For example, when Dan Siroker joined the campaign as a volunteer in December 2007, he realized that the campaign was doing a good job driving traffic to its website and raising money off
emails. The problem, however, was that people were visiting the website but failing to sign up for the campaign’s email list. To address this ‘bottleneck’, Siroker created a number of variations of the ‘splash,’ or landing, page. This involved creating a matrix of different designs based on alternative combinations of candidate videos, images, sign-up buttons, colors, and content. The result from this relatively simple test was that an optimal combination of images, content, and design resulted in a 40% higher email sign-up rate for the campaign. This translated into millions of additional supporters on the email list and, given metrics from emails, millions of dollars and thousands of volunteers extra for the campaign.

The power of analytics for all aspects of the campaign’s website content and design was at that point readily apparent to staffers within the Division. The demonstration with the splash page sent a clear message to staffers that their instincts seldom revealed what was optimal in terms of producing the numbers the campaign desired. For example, nearly every staffer in the Division preferred a long, introductory and inspiring video of the candidate to the static images on the splash page. Yet, email signup rates with the video were abysmal. It was the power of this demonstration, in part, that led to Rospars’s decision to create an analytics team within the Division. After finishing up at Google, Siroker returned to the campaign full time as its Director of Analytics in June. In the interim, email staffers continued to run split testing based on segmentation of the email list. Siroker started out with one full time staffer, McCartney, and by the end of the campaign the team had grown to six staffers and a couple of volunteers. The team grew, in part, given how easy it was to justify additional hiring given how high the returns on investment for each analytic staffer was. Similar to other innovations in electoral politics, many of these analytic staffers and volunteers came from careers other than politics. Outside of one
former Clinton staffer, the rest of the analytics department either came from industry as engineers or had specialized computer or data management skills.

Under Siroker’s direction during the general election, the analytical practices of the campaign grew much more sophisticated. For example, the backend analytics around the splash page changed dramatically (see figure one). Staffers began segmenting visitors to the Website into different user categories based on knowledge they gleaned through data on all the actions that users took on BarackObama.com stored in the BSD database. This included five different categories of user based on their previous involvement with the campaign and five measures of likely candidate support depending upon the geolocation (state) of the visitor to the website. To maximize the likelihood that users would make a first-time or repeat donation or volunteer, the campaign displayed different, optimized content tailored to these categories of users. The campaign chose this content based on design and content experiments with these different subsets of voters.
**Figure One:**

### Current splash page behavior

<table>
<thead>
<tr>
<th>Characteristics of visitor</th>
<th>Geolocation of visitor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visited site previously</strong></td>
<td><strong>Strong Democratic</strong></td>
</tr>
<tr>
<td>yes or no</td>
<td>yes or no</td>
</tr>
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<td>no</td>
<td>no</td>
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</tbody>
</table>

- sign up and make a donation of $15 or more for a car magnet
- make a donation of $15 or more for a car magnet
- make a donation of $30 or more for a t-shirt
- make a donation now without merchandise incentive

### Proposed splash page behavior

<table>
<thead>
<tr>
<th>Characteristics of visitor</th>
<th>Geolocation of visitor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visited site previously</strong></td>
<td><strong>Strong Democratic</strong></td>
</tr>
<tr>
<td>no</td>
<td>yes or no</td>
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</tr>
</tbody>
</table>

- welcome and sign up to learn more
- sign up and make a donation of $15 or more for a car magnet
- make a donation of $15 or more for a car magnet
- make a donation of $30 or more for a t-shirt
- make a donation now without merchandise incentive
- N2N

Other potential characteristics: registered to vote, skipped splash page many times

This is a reproduction of the original spreadsheet for the splash page. VFC stands for Vote For Change - the campaign’s online voter registration tool. N2N stands for Neighbor to Neighbor, the campaign’s online calling tool.
As detailed above, these small differences in design and content, such as whether to present a video or static image to first-time website visitors, generated millions of additional email addresses for the campaign. Outside of the efforts around signups for email, much of the optimization work of the campaign focused on increasing donations given that it was both easy to measure and crucial to the Division and the campaign. Even more, the analytic staffers knew that much of the campaign’s persuasion efforts, such as actually convincing a voter to support Obama or turnout, were best handled in the field, through the online organizing on MyBO, or in television advertisements. Siroker’s challenge, then, was moving the online fundraising from a system where everyone coming to the website generally saw the same content to producing this personalization on the basis of individual characteristics, campaign involvement, and geolocation, similar to the splash page. Siroker discovered, for instance, that if a visitor had never donated they were most likely to respond to an appeal that said ‘donate now and get a gift,’ whereas the most effective appeal for a supporter who had already donated was simply ‘contribute.’ As Siroker (personal communication) describes:

> the difference between those two [phrases] was so staggering in terms of looking at the statistics, looking at everything, that I think that is an opportunity where if we had learned that earlier instead and said we really need to customize everyone’s experience, based off of who we know, what we know about them -- there is such an opportunity to raise more money and to get more people to engage and volunteer.

The search for ever-higher ‘conversion rates,’ or the fashioning of users into donors, through personalization led to the ever expanding scale of analytic testing. The campaign generated over 2,000 slightly varying contribution pages and ran trials on them all. It also tested the width, color, and page placement of donor buttons as well as the images and content on the contribution pages based on these different categories of individuals. Staffers themselves marveled at the work of the analytics team. As Teddy Goff (personal communication, July 6,
2010), who oversaw Obama’s state-level new media teams during the general election, describes: “it was the coolest thing that I ever saw, different audiences actually peaked different responses to colors.” These analytic practices, in turn, were premised on productive collaborations between the analytics team and others within the New Media Division. As Thomas (personal communication, August 18, 2011), describes:

So, we can test things like on the website based on like button colors on the types of content that we put in certain areas. We could do testing on web pages so we know where people are clicking. A lot of these analytical tools informed what we were already doing design wise. There were certain ways that we could test a lot of our decisions early on....And I think the analytics team, I call them the line backers of our organization, because they were really the ones that were tackling, delivering the information that we needed in order to come out with the design that we know was also the most effective.

Online Advertising

To drive traffic to its My.BarackObama.com platform and applications such as Vote for Change the New Media Division built an extensive online advertising program. While it historically has played a generally minor role in the new media operations of most campaigns, the Division made online advertising a priority as a technology of control and did so with broad goals. For one, the Obama campaign housed its online advertising program within the New Media Division, a decision that was the product of Rospars’s early negotiations for organizational jurisdiction. Rospars also made the decision that the Division would handle all of its online advertising internally. This meant that rather than relying on outside vendors, new media staffers produced all of their online advertising and negotiated their placement through advertising networks in-house, saving the campaign a significant amount of money.

The campaign had three primary objectives for its online advertising. The first was to build a robust supporter base, the metrics of which included signups to the campaign’s email list
and fundraising. The second was persuasion, which involved advertising around initiatives designed to appeal to groups of individuals the campaign profiled as undecided. Persuasion accounted for the majority of the campaign’s online advertising expenditures. Finally, there was mobilization, which entailed a cluster of related activities such as voter registration, early voting, polling and caucus location look ups, get-out-the-vote operations, volunteer recruitment, and fundraising. As these goals suggest, internet advertising was integrated into all of the Division’s activities.

The campaign measured its progress towards these goals by rigorously generating and continuously evaluating metrics on the effectiveness of its online advertising. Online advertising is a closed loop; staffers instantly know responses to ads through data on ‘click throughs.’ Tracking these ‘click throughs’ in real time enabled staffers to continuously measure the outcomes and calculate the returns on investment of all its online advertising. Based on this data, the campaign’s online advertisers developed a working ‘social-psychology of browsing’ to underlay their practice, crafting appeals, testing graphics, making allocative decisions, and reformulating goals based on user actions.

For example, developing metrics for online advertising was a central part of staffers’ work. To do so, staffers clearly specified the outcomes they wanted around their three goals: building the supporter base, persuasion, and mobilization. With respect to building the supporter base, advertising goals included generating sign-ups for the campaign’s email list, driving traffic to the website, and donations. Persuasion metrics included the number of click throughs to applications designed to appeal to undecided voters, such as the ‘tax cut calculator’ that enabled individuals to calculate how much money they would save under the candidate’s proposed tax cut plan. The Division used online advertising to heavily promote the calculator, targeting a
wide audience on general interest online news sites. Other metrics for the campaign’s persuasion advertising entailed click through rates on targeted issue advertising to voter groups and individuals through purchased America Online and Yahoo user data (see Kaye, 2008). These were initial steps at developing individual-specific advertising. As Michael Bassik, among the founders of the field of online political advertising, describes:

In 2008 Yahoo! partnered with Catalist to do a merge of the Catalist data and the Yahoo data so that individual organizations could advertise just to match segments and ‘look-a-like’ segments. For example, say Yahoo! has a list of 100,000 people and Catalist has a list of 100,000 people and they find 20,000 people in common. Yahoo then also finds other people within their ‘network group’ that has the same sort of behavior and tries to get a match, so that is the ‘look-a-like’ audience. And then organizations were invited through this relationship between Catalyst and Yahoo! to advertise just for democrats, just to republicans, just to independents that type of thing. Yahoo provided data back to an independent third party organization in terms of who saw the ads personally, which ads they saw and clicked, and then they did a phone polling to identify whether or not exposure to the ads moved perceptions. So while there have been advertising technology that have allowed very targeted messaging in the aggregate there has yet to be someone who is connected the dots on a personally identifiable basis like we can with direct mail.³

The campaign also engaged in banner and search engine advertising, in addition to a utilizing a new advertising vehicle: Facebook. The commercial social networking service provided a wealth of new ways to target groups of voters. These ads are based on a ‘cost per click’ model, where the campaign only pays when an individual sees an ad and clicks on it. On Facebook, the campaign targeted advertising based on a host of different characteristics revealed on their profile pages, from political persuasion and religion to their hobbies.⁴

The metrics around mobilization were more complicated given the frequent need to target individuals by state for electoral purposes. Online advertising staffers closely collaborated with field staffers around these initiatives. Jon Carson’s Field Division actually provided the funding
for the mobilization advertising. Carson was an advocate of online advertising, in large part because his Division calculated the cost of hiring field staffers versus online advertising and found that the latter would have greater reach for some key electoral goals such as registering voters. As Andrew Bleeker (personal communication, June 30, 2010), the Director of Internet Advertising, explains:

We were scalable and efficient and he [Jon Carson, the National Field Director] knew the cost of doing things offline, so he was the one who advocated doing things online. In a lot of cases we can do more of it and more cheaply then you can do door-to-door.

For new media staffers, this meant using online ads to capture email address, recruit volunteers, register voters, provide supporters with information on their polling locations, and turn them out on election day. The key to all of these activities, similar to the targeting techniques used in the field campaign detailed above, was mobilizing only those individuals likely to be supporting the candidate. For example, online advertising staffers worked with field staffers to identify target demographics in each battleground state. Staffers wanted to avoid spending money on online ads that would boost John McCain’s turnout, so online advertising would be allocated towards sites popular with younger, African American, and Latino voters. Staffers also used the geo-location targeting made possible by IP addresses to display ads to individuals residing in areas that had high concentrations of Democratic voters and favorable demographics. The campaign also used innovative means to track the effectiveness of online advertisements in this area. Staffers ran a series of experimental trials, for instance, to assess whether an individual responding to an online advertisement for Vote For Change actually registered to vote. They did so by matching the names of individuals who clicked through the ad and signed up online to published lists of new voters issued by secretaries of state.

Online advertising, like much of the campaign’s messaging and design work, was
conducted through the computational management practices. Staffers generated ROIs for all of its advertisements and compared them with other communications. For example, to determine where to allocate resources to register voters through Vote For Change, the campaign began by weighting variables relating to the field plan, priorities of the state organizations, the rules of each primary, the targeted demographics, and the requirements for capturing data. Staffers than ran trials and assessed the performance of the online tools at its disposal to help meet this goal, determining the relative effectiveness of email versus online advertising for each different category of voters.

Meanwhile, staffers tracked the ROIs for particular ads over time, such as thirty or sixty days, and for a range of actions. Looking at these ROIs enabled staffers not only to find optimal content and placement, but to follow their performance over time and for a range of possible actions. Staffers looked at the effectiveness of ads on many levels, such as whether individuals responding to ads to look up their polling place also donated to the campaign. For example, if an individual clicks on an ad and signs up for the email list, staffers followed their actions over the ROI time to see if they took other actions such as donating, volunteering, or hosting an event. Staffers then calculated how many more sign-ups or polling place look ups would happen with each additional dollar invested in advertising, which then shaped how the Division allocated its funds. For example, Rospars (personal communication, June 25, 2010) cites how the campaign knew “whether an online ad resulted in that person voting absentee or requesting a ballot, and then we also know if that person stays on the e-mail list or winds up donating or goes on to a volunteer activity. So we can measure our ROI for the ad and make all sorts of choices about where to run these ads. And how we deal with our budget through lots of very complicated assessments on our return on investment financially and from a volunteer perspective.”
Organizational priorities, in turn, shaped what counted as ‘maximizing returns’ from online advertising. Sometimes the campaign was more than willing to only get back an estimated fifty cents on the dollar for every ad that it ran. This was the case if staffers knew that the ad reached people the campaign could not contact through its other outreach efforts or if the Division prioritized signups to the email list and not financial contributions. Importantly, though, the Division always made these decision based on analysis of data. As Rospars (personal communication) explains:

I don’t believe in things you can’t measure. I mean, no doubt saturating every newspaper and TV site or whatever in the state before the primary with Obama stuff creates some impression. I just don’t know what that impression is. I would rather get those impressions for half as much money by thinking about hybrids of how can I deliver the message...and then spend money smartly.

Just as with the Division’s other staffers, for many online advertisers the ability to place hard metrics behind their work made it superior to the ungrounded assertions that broadcast media advertisers often made for the power of television, radio, and print ads. Indeed, a number of the new media staffers resented that the Obama campaign spent vastly more on these forms of ‘traditional’ advertisements than new media given that they violated the central tenet of their work that returns on investment be quantifiable. A number of staffers argued that these expenditures were more about the inertia of veteran political consultants and their interest in keeping spending levels on traditional media high than any advantage they provided to the campaign. This is not to say that the campaign’s new media staffers thought that traditional campaign advertisements did not work at all. It was that, in contrast to their own computational management practices, there was no good data on how well they worked, and that those pushing advertising often failed to specify any metrics for measuring it.

All of which meant that the online advertisers knew what there work accomplished and
took a great point of pride in their conviction that they spent the campaign’s money well. Division staffers, for instance, often cited how more people looked up their polling place online during the general election than provided the margin of Obama’s victory (Bleeker, personal communication, June 30, 2010).

**DISCUSSION**

In its management of new media work and optimization and advertising practices, the New Media Division of the Obama campaign functioned as a “computational object” (Kallinikos, 2006) that based much of its communication, coordination, and design practice on the data that continually rendered an ever-shifting reality of supporter engagement. Rhetoric, design, and quantification went hand in hand on the Obama campaign. As the campaign watched people rendered visible through data generated on their online actions, staffers learned the most effective content and design that generated the most money, email signups, and volunteer hours.

The above discussion make it clear that the Obama campaign’s New Media Division was expressly designed to accomplish a clear goal: electoral victory. To this end, computational management and its attendant technologies of control enabled staffers to channel and leverage the vast supporter energy mobilized by Obama. It is also clear what supporters were not called upon to do. Despite its sophisticated technologies, supporters had little opportunity to engage with the campaign outside of very limited, defined domains of electoral action. Supporters could easily join the email list and use an online calling tool to contact undecided voters, but they could not gain a staffer’s ear about a policy position, challenge the candidate’s electoral strategy, or reply to any of the hundreds of emails the campaign sent out over the course of primaries and
general election. Indeed, these computational management practices went hand in hand with the
goal-driven, electoral orientation of the campaign more generally that made it so effective.
Campaign Manager David Plouffe (2010), after all, characterizes much of his work as precisely
in terms of the same kind of numbers game and data monitoring from the field that
computational management and calculating returns on investment suggests.

This is not to say that all campaigns and social movement organizations use new media
technologies in a similar fashion. Interestingly, as Dave Karpf (forthcoming) reveals, MoveOn
captures data and uses similar analytic techniques to monitor the issue preferences of members,
without their knowledge. Karpf calls these kinds of tacit feedback and strategizing through
analytics “passive democratic engagement,” as much of it occurs through the measurement of
click-through rates which users are unaware of. The Obama campaign, by contrast, made mostly
transactional use of these same technologies. More research is needed to both map and
understand the differences in how campaigns and movement organizations use these
technologies. Indeed, the literature is generally lacking deeply detailed accounts of how new
media is embedded in organizations, institutions, and practice (for an exception see Howard,
2006).

At the same time, we need more research on the implications for these new media practices
for democratic life. To date, much research has focused on the mobilization (Bimber and Davis,
2003; Kerbel, 2009) and participatory potential of new media technologies (Benkler, 2006;
Shirky, 2008) and less on accounts of how they improve organizational efficiency or amplify
institutionalized campaign practice (Hindman, 2007). Research remains to be done on whether
data and analytic technologies are reshaping other divisions of campaigns outside of new media,
such as field and communications. At the same time, this study only looks at the Obama campaign, which had comparatively higher new media budgets than the other campaigns of the 2008 cycle. Research on new media campaign practice more generally that looks across campaigns, and at different levels of office, remains to be done.

CONCLUSION

For the Obama campaign, new media were both a means for supporters to gather around the candidate and, at the backend, tools for managing resources and probabilistically producing supporter action. To understand the Obama campaign requires having both uses of new media within our frame of reference. While the participatory aspects of the campaign are well documented, this paper reveals how one reason the campaign was as successful as it was in its uptake of new media was staffers’ development of powerful management techniques predicated upon the continual analysis of data. The campaign was able to direct its limited resources efficiently and engage in new media practices that staffers knew were effective in terms of meeting clearly delineated goals. All of which suggests how the Obama campaign was as much an organizational as a technical achievement.

Meanwhile, optimizing content and targeted online advertising provided powerful means of producing electoral participation that maximized its use to the campaign. Much of this work seemingly amplifies older practices of campaigning. The Obama campaign extended persuasive communication tactics, launching an unprecedented internet advertising effort designed to target defined groups of voters. Internet advertising amplifies the old practice of direct mail, where campaigns deliver communication to subsets of voters based on their identity and interests as gleaned through behavioral, commercial, and public data. Importantly, optimization and online
advertising allowed the Obama campaign to say different things to different people, often based on real-time data. Based on demographic and behavioral profiles presumed supporters saw ads urging them to register or vote early. Others modeled as undecided received ads about issues that were designed to appeal to that individual’s demographic profile. Meanwhile, the campaign spent over $16 million dollars in 2008 alone on services to deliver online political advertisements to users based on search terms and cookies that track browsing habits across multiple sites on the internet.

At the same time, control is not deterministic. The campaign was not the “managed” one that many have featured (Howard, 2006). Instead, data systems and optimized content produce predictive, probabilistic outcomes. And yet, this picture of the campaign is also far from narratives that envision it as a social movement. From comprehensive databases to analytic techniques, the campaign not only leveraged the online participation of millions of supporters, but used tools to increase staffers’ ability to mobilize, motivate, and coordinate electoral action. In the end, digital media provide campaigns with new tools to fashion supporters into the implements of campaign strategy. These tools work best as coordinating machinery, a form of participation that is about sheer numbers to be mobilized to deliver fiscal, human, and political resources to elite combatants in the public sphere. Accordingly, these forms of participation in the electoral context do not bring about fundamental changes in the levers of accountability, modes of political representation (Coleman, 2005), quality of the conversation, or distribution of power that many have hoped.
Works Cited


See, for example, Kallinikos’s *The Consequences of Information* work on how financial organizations are computational objects that continually process information. In *Niche Envy*, Turow, meanwhile, chronicles how within the new media advertising industry, user ‘clicks’ have long been measurable, quantifiable human responses that form the basis for content and allocation decisions.

Online advertising for political campaigns generally only became a dedicated expenditure for campaigns during the 2004 presidential cycle. Allocations in this area, however, have remained very, very small (the discussion of Kerry and Obama are by far the exceptions. Only the largest campaigns dedicate these expenditures.) Bassik, a close observer of the industry, argues that the Clinton campaign was only interested in online advertising if it was going to generate a financial return, while Obama used advertising more expansively to recruit and mobilize supporters; personal communication, May, 9, 2011.

Bassik, personal communication, May 9, 2011. There is precedent for this. In 2002, the RNC and DNC provided voter file data to AOL, which the company than matched with its membership. This enabled these parties to advertise directly to self-identified supporters. The other way to target advertising is to use the services of a firm called “Campaign Grid,” which services Republicans. Campaign Grid matches a national voter file with public voter and consumer data furnished by firms such as Experian and information gleaned from cookies to enable campaigns to serve ads to categories of voters such as a registered Republican who lives in Pennsylvania, drives a Ford Explorer, and a past donor to a congressional campaign. Importantly, this is anonymous targeting in the sense that the campaign is not advertising to an identifiable individual, but to a person who has a set of characteristics.

The other model is a cost per impression, where campaigns pay based on simply page loads of an advertisement.

See Kallinikos, *The Consequences Of Information*, for an analysis of the ways that computation has transformed the internal workings of organizations.