

The Sources of Innovation in Political Communication: A Comparative Analysis of the  
Careers of Digital, Data, and Analytics Staffers on Republican and Democratic  
Presidential Campaigns and Partisan Firm Founding, 2004-2012

Daniel Kreiss  
Christopher Jasinski  
School of Media and Journalism  
University of North Carolina at Chapel Hill

Paper to be presented at the Political Communication Pre-conference at the American  
Political Science Association Annual Meeting, September 2, 2015

The authors thank Dave Karpf and Patrick Ruffini for comments on an earlier version of  
this article.

**Abstract**

This mixed-methods study offers the first systematic analysis of the employment biographies of staffers working in digital, data, and analytics on American presidential campaigns, and the rates of firm founding by these staffers, from the 2004 through the 2012 electoral cycles. Using Federal Election Commission and LinkedIn data, we traced the professional biographies of every (n=626) staffer working in digital, data, or analytics on primary and general election presidential campaigns during this period that we could identify. We found uneven professionalization in these areas on political campaigns, defined in terms of staffers moving from campaign to campaign, with some core staffers moving between campaigns but high rates of new entrants to the field. Drawing on theories in organizational sociology that argue that transpositions of people, skills, and knowledge across domains give rise to innovations and firm founding that institutionalizes them, we analyzed differences between the two parties. Democrats had considerably greater numbers of staffers in these areas and from the technology industry, and much higher rates of firm founding. We present qualitative interview data (n=62) to provide examples of technological innovation on presidential campaigns, explain these aggregate differences between the two parties in digital, data, and analytics, and suggest why they are consequential from an electoral perspective.

While innovation is the subject of a vibrant interdisciplinary research tradition in domains ranging from the biotechnology industry to state formation, to-date few political communication scholars have considered when, why, or how innovations in electoral campaigning might occur. Furthermore, much of the political communication literature has generally overlooked the question of how campaigns keep pace with, and innovate in, rapidly changing media environments. Practitioners must learn how to navigate changes at the “application layer” of the internet such as new social media platforms and changes in the algorithms of Facebook and Google (Karpf, 2012), and take up new tools such as relational databases and practices such as predictive modeling that provide competitive electoral advantage.

Perhaps as a result, to-date in the academic literature there have been few inquiries into the well-documented asymmetry between the two parties when it comes to the staples of contemporary political campaigning: digital media, data, and analytics. A number of journalistic accounts (*see* Chen & Givens, 2013; Hong & Nadler, 2012; Issenberg, 2012; Thaler, 2012) as well as research produced by the political consulting industry and parties themselves (*see* GOP Growth and Opportunity Project, 2013), suggest that there are significant differences between the two parties with respect to how effectively they use digital media, data, and analytics in electoral campaigning. During the 2012 presidential campaign, for instance, it is now well documented that President Obama's re-election effort was far more sophisticated in its use of social media, data, and analytics to communicate with voters and mobilize supporters than its Republican rival. As the Republican Party's own internal Growth and Opportunity Project Report (2013, p.

24), a comprehensive assessment of the party's technological systems and comparison with its rival, stated:

Democrats had the clear edge on new media and ground game, in terms of both reach and effectiveness. Obama's campaign knocked on twice as many doors as the Romney campaign, and Obama's campaign had a ballot edge among those contacted by both campaigns. In addition, the president's campaign significantly changed the makeup of the national electorate and identified, persuaded, and turned out low-propensity voters by unleashing a barrage of human and technological resources previously unseen in a presidential contest. Marrying grassroots politics with technology and analytics, they successfully contacted, persuaded and turned out their margin of victory. There are many lessons to be learned from their efforts, particularly with respect to voter contact.

In recent years, a body of work within organizational sociology has sought to explain how innovations in technology and practice emerge, and it does so in ways that may help explain these differences between the two parties and their presidential campaigns in 2012. John Padgett and Woody Powell define innovation as "things neither present nor anticipated by anyone in the population" (2012, p.1). These scholars argue that innovations, inventions, and new organizations emerge through "network folding" (or re-combination). Network folding "involves transposing social relations from one domain into another" through biographies that cross-domains or strategically-placed actors that reconfigure networks across domains of activity and create the possibility for new practices (Padgett & Powell, 2012, p. 6-7). In other words, in the political context,

staffers who come to politics with significant work experience in other sectors or learn their trade outside of the established Beltway consulting culture are likely the sources of innovation in electoral politics. In rapidly changing technological environments and media systems characterized by high degrees of hybridity (Chadwick, 2013), parties, campaigns, representatives, and consultancies are likely increasingly seeking staffers with up-to-date skill sets, as defined by the current practices in the technology and commercial sectors, to gain competitive advantage.

To reveal the extent of differences between the parties, and offer potential explanations for them, we draw on Padgett and Powell's theory of innovation and present the first systematic analysis of staffing patterns in digital, data, and analytics and firm founding during the last three presidential cycles. Using an innovative dataset coupling Federal Election Commission data on campaign staffers with LinkedIn data on employment biographies, we compiled and coded the careers of every staffer (n=626) we could identify who worked on digital, data, or analytics for a presidential primary or general election campaign during the 2004, 2008, and 2012 cycles and charted rates of political firm founding by these staffers. In contrast to much literature that presumes the professionalization of political campaigns (for a review see Strömbäck, 2007), we found that staffers are, at best, unevenly professionalized in these areas (e.g.: Nielsen, 2012), with those having previous campaign experience being in the minority of total staffers. While there are certainly flows of staffers from campaign to campaign, and from the political field more generally to presidential campaigns, on the whole the field is markedly open to field crossers in these domains.

Meanwhile, in contrast to scholars that assume general parity between the two parties, we found significant differences in the staffing patterns of Democratic and Republican campaigns with respect to the domains of digital, data, and analytics. Democratic campaigns on the whole, and especially Obama's two presidential runs, have significantly higher rates of staffing in these areas. Furthermore, Democratic campaigns, and again particularly Obama's two runs, have attracted comparatively more talent from outside the political field, especially the technology industry. We also find significantly higher rates of political firm founding on the Democratic side of the aisle by these former presidential campaign staffers across all three presidential election cycles.

Taken together, the cumulative effect of greater investments in digital, data and analytics across election cycles, the transfer of skills, practice, and knowledge from technology and commercial industries to Democratic campaigns, and the founding of firms to institutionalize the innovations that emerge and carry them across many other sites in the extended party network, may explain the well documented differences between the two parties' presidential candidates in 2012. To contextualize these quantitative findings, we provide qualitative data drawn from interviews with 62 party and campaign staffers drawn from two larger book projects of the first author.

### **Literature Review**

“I was like what is the plan because at that point I knew he (Obama) was going to run and you know he asked me to help come up with a plan, right. Like what should we be doing, how should we be thinking about it, what is different, should we just stand up '08 and do it all over again? The answer is really no -

there were things about the campaign that weren't perfect the first time and the world moves on us and so we need to sort of be thoughtful about setting up a campaign to win 2012." – Michael Slaby, Chief Integration and Innovation Officer Obama 2012, personal communication, September 4, 2013.

Michael Slaby's quote captures how Obama's re-election team approached the 2012 campaign. In the four years after Barack Obama's successful and historic bid for the presidency, veterans of that effort saw themselves operating in an entirely different technological context. To take but one example of these changes, the 2008 Obama campaign's tweet announcing victory was re-tweeted (or shared) 157 times. In 2012, by contrast, the Obama campaign's tweeted photograph on the eve of the re-election of the president embracing the First Lady received more than 800,000 retweets in less than three days (Kreiss & Welch, 2015). Meanwhile, entirely new platforms such as Tumblr and Pinterest, and social media platforms with growing user bases that continue to evolve such as Facebook, have changed the ways campaigns commune with voters. All of which makes for a highly dynamic media environment that campaigns and political practitioners must navigate in the service of their electoral goals. As Dave Karpf (2012; emphasis in the original) has argued in a piece that has sweeping ramifications for political communication:

The Internet is unique among Information and Communications Technologies (ICTs) *specifically because* the Internet of 2002 has important differences from the Internet of 2005, or 2009, or 2012....The Internet's effect on media, social, and political institutions will be different

at time  $X$  from that at time  $X + 1$ , because the suite of technologies we think of as the Internet will itself change within that interval.

These changes in the application layer of the internet over the last four years are simply one aspect of more sweeping shifts in technology, media, social structure, and cultural practices that have taken shape over the last few decades - all of which have great consequence for shaping the world campaigns must act in for electoral gain (for a comprehensive summary and discussion of how and why this matters for political communication, see Bennett & Iyengar, 2008; for works that discuss aspects of shifts in media and social structure, see Bennett & Mannheim, 2006; Bennett & Segerberg, 2013; Castells, 2010; Chadwick, 2013; Papacharissi, 2013; Prior, 2007; Rainie & Wellman, 2012; Stroud, 2011; Williams & Delli Carpini, 2011.) Bimber, Flanagin, and Stohl, (2013), for instance, theorize a complex “collective action space” shaped by the expectations and desires of citizens, the social and technological context, and the forms of engagement organizations provide. In findings that suggest new logics for campaign volunteerism, these scholars find that formal civil society organizations have changed their relationships to their memberships and are providing new opportunities for engagement given the changing orientations and actions of networked citizens.

The changes in the tools and practices that campaigns use to appeal to the electorate and mobilize supporters for resources such as funds and volunteers are a product of shifts in media and technology both internal and external to the political field, as well as the advances of database and other technologies. A number of scholars have traced the changing ways that campaigns take up digital and networked technologies. Campaigns of the 1990s generally utilized the internet as an extension of broadcast



advertising, while during the 2000 and 2004 presidential cycles campaigns began utilizing networked technologies to mobilize supporters to give money, disseminate campaign messages, contact voters, and turn out the vote (Foot & Schneider, 2006; Stromer-Galley, 2013). Franz and Ridout (2007) show how campaigns adapted to the proliferation of broadcast and cable outlets and an explosion of data by ‘micro-casting’ advertising to targeted segments of the electorate. Nielsen (2012) reveals how media fragmentation, the perceived over-saturation of political advertising, and knowledge that appeals to citizens on their doorsteps were effective lead to a resurgence in field campaigning over the past two decades premised on new databases, analytic skills, and electoral practice. Howard (2006) shows how campaigns have taken up databases and targeting technologies to directly appeal to members of the electorate (see also Hersh & Nall, 2015; Issenberg, 2012). Chadwick (2013) shows how campaigns and other political actors engage in contests over framing and attention across platforms in hybrid media systems.

The question is how campaigns and other strategic political actors adapt to changing technological contexts and innovate for competitive advantage. As detailed above, journalists, political practitioners *from both parties*, and scholars have all documented differences between the 2012 presidential campaigns and the comparative lack of digital and social media, data, tools, and resources on the Romney campaigns (for an overview, see Alter, 2013; Engage, 2012; Sides & Vavrek, 2013). Why are some campaigns, and the Democratic Party, seemingly more innovative? In their work analyzing innovation and organizational invention, Padgett and Powell (2010) take a historical and network-based approach to show how the movement of people across

different fields of activity is often the catalyst that gives rise to new technologies and practices and, ultimately, new organizations built around them. As these authors (Padgett & Powell, p. 11) detail the process of organizational innovation:

We often observe organizational innovation triggered by unanticipated transpositions of people from one domain to another, who carry with them production skills and relational protocols that mix with and transform skills and protocols already there. Organizational invention, following such innovation, is usually the slower process of the new innovation percolating around the networks in which it is embedded, tipping them into new typologies and interactional forms along the way. More radical episodes of this process lead to “innovation cascade.” Restructured biographies are the medium through which network spillover is transmitted.

Padgett and Powell theorize process of innovation and demonstrate it empirically in a number of case studies, from joint-stock partnerships to the Russian mobile technology market. Electoral politics is not one of them. Building off this literature, we seek to explain the apparent differences between the two parties documented extensively above in terms of their ability to wield digital media, data, and analytics in the service of their electoral goals. Given the literature on innovation, we expect to find comparatively more staffers working in digital, data, and analytics and higher rates of field crossers between the commercial and technology industries and electoral politics on Democratic presidential campaigns, especially Obama’s two runs. Following Padgett and Powell, we

also expect there to be significant differences in firm founding between the parties based on these investments in and flow of staffers across fields, with Democrats having higher rates of organizational invention.

Taken together, we expect that these dynamics can explain the extended Democratic Party network's edge in digital, data, and analytics that are well documented in the political field (see, for instance, Engage, 2012; GOP Growth and Opportunity Project, 2013). Organizational innovation and invention can give rise to significant transformations in the networks in which they occur (and political consulting and staffing is rarely, if ever, bipartisan; see Karpf, 2012). As Padgett and Powell have argued in their studies of innovation and invention: "In the short run, actors create relations; in the long run, relations create actors... If actors – organizations, people, or states – are not to be assumed as given, then one must search for some deeper transformational dynamic out of which they emerge" (2012, p. 3). To-date, the political communication literature generally lacks an account of how innovations and new organizations arise in "party networks," the actors ranging from party organizations, consultancies, social movement organizations, civil society groups, and activists that constitute the political parties (Masket et al., 2014). Party networks that are able to generate field crossing from the technology and other industries into politics, which in turn has the capacity to give rise to new organizations such as consultancies, should be more innovative than those that fail to attract this movement across domains (for an argument as to the role of consultants in strategy diffusion, see Nyhan & Montgomery, 2015; for an argument about the role of consultancies as conduits for the diffusion of knowledge and practice, see Scott, 2014.)

### Method

Using data from the nonprofit and nonpartisan website ‘Democracy in Action’, which organizes FEC data by campaign and couples it with information gathered directly from campaigns and other public accounts of elections, we compiled a list of all staffers who either worked in campaign divisions dedicated to digital, data, or analytics or who had these words in their organizational titles from the 2004, 2008, and 2012 presidential cycles. While it is not exhaustive (there is no perfect source given difficulties working with FEC data), the site provides the most comprehensive staffing information in existence on presidential campaigns going back to 2000.<sup>1</sup>

We chose to start with the 2004 cycle, the first time that campaigns routinely began developing stand-alone ‘internet’ divisions (Kreiss 2012; Foot & Schneider, 2006; Stromer-Galley, 2014), while data and analytics only became a routine feature of campaigns in 2012. The campaigns included in this analysis include: Dean (2004), Kerry (2004), Kucinich (2004), Clark (2004), Edwards (2004), Lieberman (2004), George W. Bush (2004), Edwards (2008), Richardson (2008), Kucinich (2008), Dodd (2008), Biden (2008), Clinton (2008), Obama (2008), Romney (2008), Guiliani (2008), McCain (2008), Paul (2008), Huckabee (2008), Thompson (2008), Obama (2012), Romney (2012), Gingrich (2012), Santorum (2012), Huntsman (2012), Bachman (2012), Johnson (2012), Perry (2012), Cain (2012) and Karger (2012).

This netted 626 staffers, 503 Democratic and 123 Republican staffers. We then searched for and manually entered details of staffers’ professional careers using the professional social networking site LinkedIn. When data was missing, we attempted to find personal and work sites that contained biographies, CVs, or resumes. This allowed us to find at least limited employment histories for *every staffer*, with comprehensive data

being the norm, which is revealing of the nature of contemporary social network use for professional purposes.<sup>ii</sup>

Staffers' biographical data were coded manually given that organizational titles change over time and are inconsistent across campaigns, and individuals change careers with surprising regularity. The second author coded each position as one of the following categories: *Previous campaign*, *Campaign*, *Political*, *Journalism*, *Entertainment media*, *Technology*, *Data/analytics*, *Commercial industry firm*, *Legal services*, *Government*, *Campaign*, *RNC/DNC*.

We coded as 'campaign' those staffers' work that was on political campaigns at any level of office. We also noted the number of staffers that had this in their background at any level of office. We coded 'political' if the position entailed work for strategy or consulting firms, non-profit, movement, and advocacy organizations. We did so given evidence of "intersectionality" in the literature on social movements, or the ways that members of movements and civil society organizations are also partisans and political actors (Heaney & Rojas, 2014). 'Journalism' refers to work for blogs or more traditional outlets such as CNN. 'Entertainment media' refers to work in organizations like MTV Networks, production companies, and other creative media firms. 'Technology' designated organizations whose primary business relates to computing, digital media, or mobile technologies. 'Education' denotes organizations such as Pearson, universities, and similar institutions. 'Data/analytics' denotes companies whose primary business is gathering, storing, or analyzing data. 'Commercial industry firm' is a category that refers to firms that are not technology, data and analytics, or consulting firms. 'Legal services' refers to law firms or legal aid organizations. 'Government' refers to public sector work

at the local, state, or national level. DNC/RNC denotes employment by an official national party organization.

Given our interest in field crossing, after coding each staffers' professional positions, we then coded each staffer for their *primary* field of employment prior to each campaign. This is the code that occurred most frequently. We also included two additional codes: N/A and mixed. 'N/A' denoted when this was a staffer's first job while in school or following graduation, or if the staffer had not listed their previous employment history. 'Mixed' was used when specific category did not occur most frequently.

This allowed us to assess the fields digital, data, and analytics staffers come from. For example, one of our research interests concerned the level of professionalization of campaigning in these areas, which we loosely define as the degree to which people start working in campaigns with little or no experience and then go on to work on other campaigns, or staffers regardless of their backgrounds who move between different campaigns pursuing similar work across cycles. In the digital, data, and analytics operations of the Obama 2008 campaign (n=132), 14 staffers had previous campaign experience, while for 31 staffers it was their first job.<sup>iii</sup> By contrast, the Obama 2012 campaign (n=339), had 72 staffers with previous campaign experience and 12 staffers joined the campaign as their first job. At best this suggests uneven professionalization and far more turnover in the field than much of the political communication literature would have us believe. It should be noted that some staffers contacted by the first author for the book project were not found in the FEC filings, suggesting that these individuals were hired through a contractor payroll or outside firm.

Given our interest in field crossing, staffers who worked multiple cycles were counted and coded anew for each campaign. For example, Uday Sreekanth worked on Hillary Clinton's 2008 campaign and the 2008 Obama general election campaign and was coded for each. Broadly, this gave staffers the possibility of having different primary fields for each campaign. We believe that coding staffers for every campaign they worked on, and their primary field prior to *each* campaign, enabled us to more accurately trace rates of field crossing.

Given our interest in firm founding, we coded whether a staffer founded a firm following a campaign and tracked the total rates of firm founding for each party and campaign. We opted to include all firms founded after their campaign work regardless of the timing or their work. We coded as firm founders staffers that indicated their titles in LinkedIn profiles as 'founder' or 'founding partner.' For example, Zac Moffat was coded having founded a firm following the Bush 2004 campaign although the firm, Targeted Victory, was founded in 2009 after his stint working at the Republican Party. Meanwhile, we also accounted for the trends of some staffers founding multiple firms or firms with their colleagues on the campaign by calculating the number of unique firms founded as well as the number of founders following a campaign cycle.

Finally, to supplement this data, we drew on open-ended, semi-structured interviews with more than 60 staffers active in Democratic and Republican Party politics conducted for a larger book project of the first author. The first author selected interviewees on the basis of both their organizational roles on campaigns and in political parties, as gleaned through public records and journalistic coverage, as well as snowball sampling.

**Findings**

After compiling, coding, and analyzing the 626 staffers in our sample, clear aggregate patterns about digital, data, and analytics on presidential campaigns emerged. First, with respect to the degree of professionalization in electoral campaigning, we find significant amounts of field crossing in these domains, with staffers joining campaigns from various commercial and technology firms (see Figure 1 for data on select campaigns). This suggests that digital, data, and analytics on campaigns are at best unevenly professionalized, with high rates of field crossers and low rates of career campaign staffers, at least in these domains.



**Table 1**  
Staffer Background and Firm Founding by Campaign

|   | Obama<br>2012 | Romney<br>2012 | Obama<br>2008 | McCain<br>2008 | Obama<br>2008<br>(Primary) | Clinton<br>2008<br>(Primary) | Kerry<br>2004 | Bush<br>2004 |
|---|---------------|----------------|---------------|----------------|----------------------------|------------------------------|---------------|--------------|
| <b>Campaign, Political<br/>or DNC/RNC</b>                 | <i>n</i> = 73 | <i>n</i> = 17  | <i>n</i> = 26 | <i>n</i> = 4   | <i>n</i> = 15              | <i>n</i> = 7                 | <i>n</i> = 11 | <i>n</i> = 1 |
| <b>Commercial</b>   | <i>n</i> = 58 | <i>n</i> = 32  | <i>n</i> = 11 | <i>n</i> = 1   | <i>n</i> = 4               | <i>n</i> = 0                 | <i>n</i> = 7  | <i>n</i> = 1 |
| <b>Journalism or<br/>Entertainment</b>                    | <i>n</i> = 32 | <i>n</i> = 2   | <i>n</i> = 13 | <i>n</i> = 2   | <i>n</i> = 5               | <i>n</i> = 0                 | <i>n</i> = 0  | <i>n</i> = 0 |
| <b>Technology or<br/>Data/Analytics</b>                   | <i>n</i> = 48 | <i>n</i> = 7   | <i>n</i> = 11 | <i>n</i> = 0   | <i>n</i> = 4               | <i>n</i> = 1                 | <i>n</i> = 1  | <i>n</i> = 0 |
| <b>Education or Legal</b>                                 | <i>n</i> = 17 | <i>n</i> = 4   | <i>n</i> = 5  | <i>n</i> = 0   | <i>n</i> = 2               | <i>n</i> = 0                 | <i>n</i> = 0  | <i>n</i> = 0 |
| <b>Government</b>   | <i>n</i> = 16 | <i>n</i> = 9   | <i>n</i> = 10 | <i>n</i> = 3   | <i>n</i> = 4               | <i>n</i> = 0                 | <i>n</i> = 1  | <i>n</i> = 3 |
| <b>Mixed or N/A</b>                                       | <i>n</i> = 95 | <i>n</i> = 19  | <i>n</i> = 56 | <i>n</i> = 6   | <i>n</i> = 20              | <i>n</i> = 2                 | <i>n</i> = 15 | <i>n</i> = 3 |
| <b>Total Staffers</b>                                     | <b>339</b>    | <b>90</b>      | <b>132</b>    | <b>16</b>      | <b>54</b>                  | <b>10</b>                    | <b>35</b>     | <b>8</b>     |
| <b>Total Staffers with<br/>Previous Campaign<br/>Work</b> | <i>n</i> = 72 | <i>n</i> = 21  | <i>n</i> = 14 | <i>n</i> = 5   | <i>n</i> = 11              | <i>n</i> = 3                 | <i>n</i> = 4  | <i>n</i> = 1 |
| <b>Firm Founders</b>                                      | <i>n</i> = 27 | <i>n</i> = 8   | <i>n</i> = 16 | <i>n</i> = 2   | <i>n</i> = 12              | <i>n</i> = 1                 | <i>n</i> = 10 | <i>n</i> = 4 |
| <b>Unique Firms</b>                                       | <i>n</i> = 24 | <i>n</i> = 8   | <i>n</i> = 16 | <i>n</i> = 3   | <i>n</i> = 13              | <i>n</i> = 3                 | <i>n</i> = 10 | <i>n</i> = 3 |

Second, there are significant differences between the two parties and their presidential campaigns with respect to hiring patterns in the areas of digital, data, and analytics. Democratic Party campaigns hired 503 staffers in the areas of digital, data, and analytics, compared with 123 Republican staffers. We found a similar difference between the parties with respect to the rates of political firm founding and the campaign staffers involved in these organizational launches. From 2004 to 2012, Democratic staffers founded 75 firms, compared with 19 firms on the Republican side of the aisle (see Appendix A for a list of firms by campaign).

Differences between the two parties in these domains hold even if we take the Obama campaigns out of the data. The Democratic primary campaigns of Dean (*n*=13)

and Clark (n=14) each hired more staffers in these areas than any of the Republican primary campaigns of the 2008 or even the 2012 cycle, except for McCain and Romney's general election bids. This suggests broad differences in the valuations placed on this comparatively new area of campaigning across party lines. These differences are even more striking when comparing general election bids. The McCain campaign had 16 dedicated digital, data, and analytics staffers, 5 with previous campaign experience. These staffers primarily came from the government work (n=3), or had no previous employment (n=4). None of the staffers came from the technology or data/analytics fields. By contrast, the Obama 2008 general election campaign had 132 dedicated data, digital and analytics staffers, only 14 of which had previous campaign experience. The majority of these staffers came from the political field (n=17), commercial industry (n=11), and the technology field (n=9).

The dataset suggests that the outsized media coverage about the digital and data savvy of the two Obama campaigns was justified, with the president's two runs accounting for much of the hiring and firm founding in these domains. One way to illustrate this is in terms of intra-party differences with respect to investment in these areas. Clinton's 2008 primary bid had 10 digital, data, and analytics staffers. Three of these staffers had previous campaign experience and most had backgrounds in the political field (n=5). None of these staffers came from the technology or data and analytics fields. By contrast, the Obama primary bid hired 54 dedicated digital, data, and analytics staffers, 11 with prior campaign experience and 8 with backgrounds in politics. Meanwhile, 3 staffers came from the technology industry and one from the data/analytics industry.

Meanwhile, looking closely at the most recent presidential campaign cycle, the Obama 2012 campaign had 339 dedicated data, digital, and analytics staffers, 72 of whom had previous campaign experience. The majority of these staffers came from commercial industry (n=58), the political field (n=49), and mixed backgrounds (n=67) (the primary category being political/commercial). In addition, 43 of these staffers came from the technology industry, and 5 from the data/analytics industry. On the other hand, the Romney 2012 campaign had 90 dedicated data, digital and analytics staffers on payroll, 21 with previous campaign experience. These staffers primarily came from commercial industry (n=32), the political field (n=11), and mixed backgrounds (n=19) (the primary category being campaign/political). Compared to Obama, Romney's campaign had considerably less staffers from the technology industry (n=7) and the data/analytics industry (n=0).

The Obama 2008 and 2012 campaigns also produced a majority of the firms in the dataset. Former staffers founded 24 firms after the Obama 2012 campaign and 16 following Obama 2008. That said, there were significant intra-party differences in firm founding across the parties as well. The Kerry and Clark 2004 campaigns launched more firms than every other Republican campaign (the former including staffers from Dean's failed presidential bid.) Meanwhile, there is considerable variation within the two parties. Romney's bid in 2012 stands out with respect to firm founding within the party, while the Democrats have more firm founding across all campaigns, but with variable rates across campaigns.

This quantitative dataset reveals broad, aggregate patterns as to the asymmetry between the two parties on the whole with respect to comparative investment in digital,

data, and analytics on presidential campaigns, the flow of differently skilled field crossers into politics, and rates of firm founding. Given the literature above, this suggests that Democratic Party campaigns, and especially Obama's two runs, had more extensive operations in these areas, were likely more innovative within them, and former staffers at the very least perceived greater market opportunities in digital, data, and analytics across the party network than their counterparts did within the Republican Party network.

The question is what explains these differential patterns of staffing and the greater investment in and comparative ability of some campaigns to hire talent from outside of the political field? Furthermore, is there evidence that these field crossers actually give rise to innovation? To answer these questions, we turn now to qualitative interview data that provides a practitioner-level view on them. Over the course of dozens of interviews conducted by the first author over the last two years, we found that staffer perceptions fit with the aggregate patterns revealed in this data.

First, staffers on both sides of the aisle cite that an important catalyst for Democratic innovations after the 2004 cycle was the extraordinary cultural influence of the Howard Dean campaign in capturing the imaginations of party actors as to the role the internet could play in politics, despite the fact that the candidate ultimately lost. Meanwhile, numerous practitioners point to the fact that Democratic Party actors perceived that John Kerry lost a campaign he should have won, which opened the door for practitioners to find market opportunities and challenge incumbent firms in the field. Within the Republican Party, Bush's victory in 2004, which was dominant from a grassroots mobilization, digital, and data perspective, provided little impetus for significantly new investments or new firms. As Alex Lundry, a senior analytics staffer on

the 2012 Romney campaign, details, what happened after 2004 changed the trajectories of the two parties:

So we win '04. I think a sense of complacency frankly sets in across the right. Whereas you have the Democrats who are facing a situation not unlike what we are facing right now, which is how did we just lose an election where we really should have won or at least we feel we should have won. What did they do that we didn't that we should be investing in? And, they went out and invested aggressively in various institutions and planted a number of seeds, which I think have come to fruition like the Analyst Institute, the New Organizing Institute, and Catalyst. I point to those three institutions as kind of the pillars of this liberal data analytics ecosystem that were really the key drivers behind the success of 2012, if not directly then at least indirectly in the buildup to 2012.

In other words, Democrats losing a campaign that party actors perceived they should have won opened the door to new investments and helped practitioners find market opportunities and challenge incumbents. On the other side of the aisle, a number of Republican staffers join Lundry in pointing to a party network-wide failure to invest in new digital and database technologies after the highly successful Bush re-election bid in 2004. For example, numerous former party staffers state that the Republican Party's primary technology vendors generally remained the same after both the 2004 and 2008 presidential elections, consistent with the data on firm founding detailed above. After the successful Bush re-election campaign, incoming Party Chair and Bush re-election bid

manager Ken Mehlman sought to bring much of the innovative digital media work of the campaign inside the party bureaucracy. The key staffers from the re-elect campaign went to work for the Party, instead of starting their own firms. This left the overall market for technology consulting services dominated by one firm, Campaign Solutions, which had few competitors. The housing of many of the Bush team's innovations and staffers within the party also meant that technological decisions and future development were subject to the formal apparatus of the party, the whims of particular party chairmen, the waxing and waning of the party's financial fortunes (which resulted in less stable revenue streams than consulting firms), and established relationships with a set of incumbent firms.

Meanwhile, an increasingly unpopular president, a disaster in New Orleans, the failure of signature policy efforts around immigration and social security, and a 2006 midterm election that featured a Democratic sweep of Congress, led to a fractured party and diminished energy. As a result, the 2008 cycle featured a wide candidate field that pitted a small handful of digital consultants from the Bush re-elect team against one another. In this environment, Campaign Solutions was "pretty much the only game in town" throughout the 2008 campaign cycle according to Katie Harbath (personal communication, August 27, 2013) a former party staffer and digital strategist on the Giuliani 2008 campaign. Meanwhile, John McCain's come-from-behind primary bid on a shoestring budget had little to do with technology, unlike his earlier run, and the general election campaign used a platform provided by Campaign Solutions that looked much like the tool behind the 2004 re-election bid in the assessment of campaign operatives. Chuck DeFeo, who was the eCampaign manager for Bush in 2004 and became CEO of

the Republican digital consultancy Campaign Solutions in 2009 in addition to later serving as the Chief Digital Officer of the RNC, argues that:

By the time they walk into 2008 they were literally sitting on not the exact same code base - but not a much more mature product than what we had in '04...By '08 which was kind of ironic to me there was not the risk taking culture in place anymore where from a business perspective the vendors weren't investing anymore, they were reaping, and from a RNC party apparatus you know the leaders that... drove that risk-taking, innovative mindset were not necessarily the drivers of '08 and they weren't driving the party any longer....

Practitioners cite that these differences between the two parties produced campaigns with different valuations of digital, data, and analytics. The Obama campaigns in 2008 and 2012 are the most obvious examples in terms of carving out senior-level and autonomous positions for digital staffers and putting resources behind them (Kreiss, forthcoming). This also extended to explicitly seeking talent outside of the political field in places like Silicon Valley. In 2008, this included staffers such as the co-founder of Facebook, Chris Hughes, who was integral to the design of the campaign's volunteer platform My.BarackObama.com, and an engineer who worked on the Chrome browser for Google, Dan Siroker, who pioneered the campaign's culture of Web optimization that netted millions of dollars and marked the first systematic use of routine A/B testing on a presidential campaign.<sup>iv</sup> In 2012, Michael Slaby (personal communication, September 4, 2013), a veteran of the 2008 campaign who came from the worlds of commercial consulting and venture capital, explicitly sought out staffers who were outside of politics

to staff the technology department given what he perceived as the campaign's needs: "an important shift in our orientation about what we were going to try and build and the kind of skills that we didn't have that we needed to go get."

One of the comparatively unsung technological innovations of the Obama 2012 campaign, an algorithmic way of buying television ads based on real-time, set-top box data on how people were watching television called the Optimizer, reveals precisely the role of these field crossers. Before ending up on the campaign, its architect Carol Davidsen spent eight years working in the telecommunications and cable industry on billing and customer relations management systems. In July of 2011, Davidsen received a targeted email from the campaign's director of analytics Dan Wagner based on her description of her profession as 'technology, data, and analytics' when she donated in 2008. Davidsen responded to the email, and after a stint on other projects developed the Optimizer in six weeks in the spring of 2012. The Optimizer used set-top box cable data to find targeted people, what they were watching, and make the most efficient local and national advertising buys.

On the other side of the aisle, numerous staffers detail differences in how digital, data, and analytics were valued on Republican campaigns and across the party-network more broadly. This cultural orientation is made manifest in a number of different ways, from organizational structures that left little room for staffer autonomy in these domains to organizational cultures that paid little heed to data-based decisions. As a number of former Romney campaign staffers related, the digital team on the campaign was essentially in service to the communications department, and went through an extensive vetting process for all of the content they were producing across platforms. Zac Moffatt



(personal communication, January 31, 2014), Romney's digital director, went so far as to describe the campaign as having "the best tweets ever written by 17 people ... It was the best they all could agree on every single time." Meanwhile, numerous staffers describe a culture where they were frustrated, blocked, and subverted by campaign hierarchies that at times put little faith in data and looked skeptically at many aspects of digital. As Alex Lundry (personal communication, June 25, 2013) describes the role of data on the Romney campaign:

We had planning meetings where this data was discussed and shared. Sometimes decisions were made in those rooms and sometimes decisions were made at some other point by other people. And, you know, I think the role of data in those decisions is; sometimes decisions were made in that room that I think were not executed on because of people who felt differently about how they should go. They were in a position to not act on it - and so the thing is, you have to have leadership and people who are in the decision-making, in a directive position on the campaign, who say 'I am going to trust the data and I am going to stick with it or I am only going to override it when I feel exceptionally strong about it in a particular way.' And, I don't think that everybody on the campaign had that commitment. I think a lot of people on the campaign did but I don't think everybody did.

It is useful to get a perspective on this comparative lack of autonomy and the organizational structure of the campaign more broadly from a staffer who joined the campaign after leaving a job in the technology industry in the Valley. Aaron Ginn joined

the Romney campaign in June 2012, and was tasked with growing the user base of the campaign's volunteer platform. Ginn cites that the Obama 2008 and 2012 campaigns were better at recruiting and making use of their technically-skilled staffers by granting them comparative autonomy. Ginn (personal communication, December 7, 2012) points to a failure of recruiting on the Romney campaign, a perspective that a number of other staffers also cited examples of: "I think they just didn't have this concept that talent is very important, especially in digital."

Part of this was organizational culture, as Ginn suggests, and part of it was also time and resources. With a long primary campaign that was draining in terms of resources, Romney's digital team had little in the way of time or money to make strategic planning and staffing decisions or engage in the extensive recruitment that the Obama campaign did throughout 2011. That said, the campaign also made decisions about how to invest in and recruit these technically-skilled people and structure them within the campaign organization that looked markedly different from the decisions that the Obama campaign was making.

There were differences between the Obama and the Romney campaigns based not only on an incumbent advantage with respect to technical development, but also calculations as to the trade-offs between hiring staffers in these domains and turning to consultancies and outside firms given the context these campaigns faced. Hiring staffers provides more accountability over technical development; staffers can manage and direct employees. For example, Slaby and others who were responsible for overseeing the infrastructure for the 2012 Obama campaign cite the fact that there is a lack of ownership and accountability when something is developed outside of the control of the party or the

campaign. Furthermore, relying on multiple external vendors often means systems that rarely interface with one another and the proliferation of data silos at their backend. Indeed, these were lessons that grew out of the 2008 campaign, when the campaign relied on multiple vendors, and lead to decisions to bring more development in-house in 2012.

Outsourcing digital, data, and analytics to outside firms, by contrast, means that campaigns may give up direct control over the services provided, use tools that are not explicitly designed for politics, and face the problem of multiple loosely-integrated systems. That said, staffers on both sides of the aisle argue this route can make sense if resources are scarce or inconsistent, or if a campaign organization has to scale up quickly (as the Romney campaign did after the conclusion of the primaries). The trade-off is that while going outside the campaign may provide robust commercial platforms, it also means a lack of control and accountability over the design and functionality of political technologies and the need to fit the products and processes of many different vendors together. Romney's staffers cited precisely these issues on the campaign. To meet their development needs, Moffatt hired external developers or specialized firms to work on specific projects. As Moffatt (personal communication, January 31, 2014) describes these arrangements and their fragility:

Every single time something went wrong in the campaign it is just because we had gone through a wave of hiring and somewhere the process broke down. And you know you see it three times it happened before the election but the really kind of amazing thing was that it didn't happen every day.

### Discussion

While digital, data, and analytics are an admittedly small, yet rapidly growing, area of investment for political campaigns, we found at best uneven professionalization in these domains on specifically presidential campaigns. Across all of the campaigns at the highest level of politics in these areas, there were strikingly few staffers who appeared to fashion their careers from working on multiple campaigns. Campaigns are markedly porous as well, attracting staffers not only from the related political field, but also the commercial sector and technology and entertainment industries. While undoubtedly a number of staffers, particularly those who found or joined new consulting firms, were likely involved in campaigning as consultants and do not show up in FEC disbursement data (given payouts to firms), it is still striking in relation to the literature that there is considerable diversity in terms of the backgrounds of staffers on campaigns. And, while we did not consider the work of political consulting firms for these presidential campaigns here, in part given the methodological challenge of trying to disentangle the services they actually provide, the high rates of firm founding suggests considerable churn in the field. Furthermore, what is clear is that some campaigns, such as Obama's 2012 run, explicitly seek alternatives to the consulting model and expressly work to *de-professionalize* their own staffs.

More time needs to pass, and more research is necessary, before scholars can determine whether these patterns of field crossing are the result of the comparative newness of these areas on campaigns or the nature of doing work in digital, data, and analytics in an era of rapidly changing technology at the application layer of the internet, or alternatively if professionalization will happen over time. Future research can also extend this method of tracing staffer biographies to other roles on campaigns such as

communications, fundraising, and field to determine whether these staffing patterns are anomalous (or analyze employment patterns in other domains of political life, such as journalism). Future research can also trace the consulting relationships on campaigns.

The data presented here also reveals clear and persistent patterns of party asymmetry with respect to staffing and firm founding in the context of digital, data, and analytics staffers. As detailed above, much of the political communication literature presumes the two parties to be generally evenly matched in terms of the resources that they bring to electioneering and pursue similar strategies as rational electoral actors. By contrast, the data presented here reveals that Democrats have made significantly greater investments in hiring staffers in these domains on campaigns and have comparatively higher rates of firm founding to institutionalize digital, data, and analytics across the party. This suggests, although future research is needed, that Democrats see the world differently from Republicans, at least in the context of electoral strategy. As the interview data presented above suggests, there are a number of explanations that practitioners put forth to explain these differences. Additional research is also needed on the consulting firms that emerge from presidential campaigns and potentially give rise to longer-term shifts in campaign technology and practice across party-networks, particularly in comparatively under-resourced down ballot campaigns. Indeed, while presidential campaigning may be unevenly professionalized in terms of staffers, more work is needed on congressional and other races that have comparatively less resources and are potentially more likely to turn to outside consultants to run their digital campaigns instead of doing things internally.

### **Conclusion**

This paper presented a novel mixed-methods study to offer the first systematic analysis of the employment biographies of staffers working in digital, data, and analytics on American presidential campaigns, and the rates of firm founding in these areas, from the 2004 through the 2012 electoral cycles. We found uneven professionalization in these areas on political campaigns, defined in terms of staffers moving from campaign to campaign, with some core staffers moving between campaigns but high rates of new entrants to the field. Drawing on theories in organizational sociology that argue that transpositions of people, skills, and knowledge across domains give rise to innovations and firm founding that institutionalizes them, we analyzed differences between the two parties. Democrats had considerably greater numbers of staffers in these areas and from the technology industry, and much higher rates of firm founding. We presented qualitative interview data to provide examples of technological innovation on presidential campaigns, explain these aggregate differences between the two parties in digital, data, and analytics, and suggest why they are consequential from an electoral perspective.

## References

- Alter, Jonathan. (2013). *The Center Holds: Obama and His Enemies*. New York: Simon and Schuster.
- Bennett, W. L. and Iyengar, S. (2008). A New Era of Minimal Effects? The Changing Foundations of Political Communication. *Journal of Communication*. 58:707-731.
- Bennett, W. L. and Manheim, Jarol B. (2006). The One - Step Flow of Communication. *The Annals*, No. 608, Nov 2006: 213-232.
- Bennett, W. L., & Segerberg, A. (2013). *The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics*. New York: Cambridge University Press.
- Bimber, B., Flanagin, A. J. and Stohl, C. (2012). *Collective Action in Organizations: Interaction and Engagement in an Era of Technological Change*. New York: Cambridge University Press
- Castells, M. (2010). *The Rise of the Network Society*. Malden, MA: Wiley-Blackwell.
- Chadwick A. (2013). *The hybrid media system: Politics and power*. Oxford University Press.
- Chen, W., & Givens, T. (2013). Mobile donation in America. *Mobile Media & Communication*, 1(2), 196-212.
- Engage. (2012). Inside the Cave. Available online at: <http://www.engagedc.com/inside-the-cave/>
- Foot, K. A., and Schneider, S. M. (2006). *Web Campaigning*. Cambridge, MA: MIT Press.
- Franz, M. M. & Ridout, T. (2007). *Campaign advertising and American democracy*. Temple University Press.
- GOP Growth and Opportunity Project. (2013). Available online at: [http://growthopp.gop.com/RNC\\_Growth\\_Opportunity\\_Book\\_2013.pdf](http://growthopp.gop.com/RNC_Growth_Opportunity_Book_2013.pdf)
- Heaney, M., and F. Rojas. (2014). *Party in the Street: The Democratic Party and the Antiwar Movement Since 9/11*.
- Hersh, E. D., and C. Nall. (2015). The Primacy of Race in the Geography of Income - Based Voting: New Evidence from Public Voting Records. *American Journal of Political Science* (2015).
- Hong, S., & Nadler, D. (2012). Which candidates do the public discuss online in an election campaign?: The use of social media by 2012 presidential candidates and its impact on candidate salience. *Government Information Quarterly*, 29(4), 455-461.
- Howard, P. N. (2006). *New Media Campaigns and the Managed Citizen*. New York: Cambridge University Press.
- Issenberg, S. (2012). A More Perfect Union. *MIT Technology Review*. Available online at: <http://www.technologyreview.com/featuredstory/508836/how-obama-used-big-data-to-rally-voters-part-1/>
- Kreiss, D. (forthcoming). *Networked Ward Politics: Parties, Databases, and Campaigning in the Information Age*. New York: Oxford University Press.
- Kreiss, D. (2012). *Taking Our Country Pack: The Crafting of Networked Politics from*

- Howard Dean to Barack Obama. New York: Oxford University Press.
- Kreiss, D., & Welch, C. (2015). Strategic Communication in a Networked Age. *Controlling the Message: New Media in American Political Campaigns*, 13.
- Karpf, D. (2012). Social science research methods in Internet time. *Information, Communication & Society* 15, no. 5: 639-661.
- Karpf, D. (2012). *The MoveOn effect: The unexpected transformation of American political advocacy*. Oxford University Press,
- Masket, S. E., M. T. Heaney, J. M. Miller, & Strolovitch, D.Z. (2009). Networking the Parties: A Comparative Study of Democratic and Republican National Convention Delegates in 2008. American Political Science Association 2009 Toronto Meeting Paper 1–47.
- Ngo, E. (2013, May 13). Obama visits NYC, hits 'hyper-partisanship' . *News Day*. Available online at <http://www.newsday.com/news/nation/obama-visits-nyc-hits-hyper-partisanship-1.5256284>
- Nielsen, R. K. (2012). *Ground Wars: Personalized Communication in Political Campaigns*. Princeton, NJ: Princeton University Press.
- Nyhan, B., & Montgomery, J. M. (2014). Connecting the Candidates: Consultant Networks and the Diffusion of Campaign Strategy in American Congressional Elections. *American Journal of Political Science*.
- Padgett, J. F., and W. W. Powell. (2012). *The emergence of organizations and markets*. Princeton University Press.
- Papacharissi, Z. (2014). *Affective Publics: Sentiment, Technology, and Politics*. Oxford University Press.
- Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. Cambridge University Press.
- Rainie, L. and Wellman, B. (2012). *Networked: The New Social Operating System*. Cambridge, MA: The MIT Press.
- Sides, J., & Vavreck, L. (2013). *The Gamble: High Rollers*. Princeton University Press.
- Strömbäck, J. (2007) Political marketing and professionalized campaigning: A conceptual analysis. *Journal of Political Marketing* 6, no. 2-3: 49-67.
- Stromer-Galley, J. (2014). *Presidential campaigning in the Internet age*. Oxford University Press,
- Stroud, N. J. (2011). *Niche news: The politics of news choice*. Oxford University Press.
- Thaler, R. H. (2012, November 17). Applause for the Numbers Machine. *The New York Times*, 17. Available online at: [http://www.nytimes.com/2012/11/18/business/how-pollsters-and-analysts-won-big-on-election-day.html?\\_r=0](http://www.nytimes.com/2012/11/18/business/how-pollsters-and-analysts-won-big-on-election-day.html?_r=0)
- Williams, B. A., & Delli Carpini, M. X. (2011). *After broadcast news: Media regimes, democracy, and the new information environment*. New York: Cambridge University Press.



**Appendix A**  
Firms by Campaign

| <b>Campaign</b>               | <b>Firm</b>   |
|-------------------------------|---|
| <b>Obama 2012</b>             | 270 Strategies<br>Amelia Showalter LLC<br>Appropriate LLC<br>Auraworks Ltd<br>BlueLabs<br>Bright Blue Data<br>Boost Your BIM LLC<br>Chicago Health 2.0<br>The Constant Group<br>City Posh<br>Civis Analytics<br>D.O. Consulting<br>el el see LLC<br>Ean Zasoski Data & Analytics<br>EdgeFLip<br>Fluence<br>Goff LLC<br>Groundswell Public Strategies Harper Rules LLC<br>Highway One Consulting<br>Modest Inc<br>Precision Strategies<br>Public Good Software<br>Timshel Consulting |
| <b>Romney 2012</b>            | Got Your Nose<br>Hynes Communication<br>Minuteman Strategy<br>Model Progress Consulting<br>Poolhouse Digital Agency<br>Red Seven Squared<br>Stormi Knight Design<br>WebDriven   |
| <b>Obama 2008</b>             | AKPD Media<br>Atlas Voter Protection<br>Bay Breeze Technology Center<br>Brad Schenck Media<br>Bully Pulpit Interactive<br>Department of Design and Semiotic Research<br>GEER<br>Jumo<br>Optimizely<br>Perseid Group LLC<br>Pinaxis LLC<br>Revolution Messaging<br>Rogue Global Solutions<br>Soapbox Interactive, LLC<br>SGF Consulting  |
| <b>McCain 2008</b>            | CRAFT<br>Outlaw Media<br>I360   |
| <b>Clinton 2008 (Primary)</b> | Level Fund<br>Graphicacy  |

|                   |  |
|-------------------|--|
|                   | Timeplots LLC  |
| <b>Kerry 2004</b> | Gladius Strategy<br>HaystaqDNA<br>Mayfield Strategy Group<br>MDC Strategies<br>New Organizing Institute<br>Original Gravity Media<br>Rawling Atlantic<br>Trilogy Interactive<br>The Wet Gecko Project<br>The Victors Group |
| <b>Bush 2004</b>  | Campaign Solutions<br>Engage<br>Targeted Victory   |
|                   |  |

<sup>i</sup> For Democracy in Action’s disclaimer about the data, see:

<http://www.p2016.org/parties/disclaimer10.html>

<sup>ii</sup> In some rare cases that did not involve first jobs out of college, staffers only had one or two previous listings for their work.

<sup>iii</sup> Given that Obama went on to become the nominee, people were listed only when it was clear that they worked during the primary season. This meant that they listed the primary campaign on their LinkedIn profile, the timeline they provided matched the primary season, or they were listed as working on the primary in the Democracy in Action data.

<sup>iv</sup> In 2012, the Romney campaign used Siroker’s company, Optimizely, for its optimization services.