HARPER REED: Game Changer

How social media's master planner helped the Obama campaign mine the voter rolls

BY **LINDA MARSA**
PHOTO BY **REID COMPTON**

With his rooster-like crest of red hair, trendy piercings and penchant for T-shirts and hoodies, Harper Reed hardly looks like the kind of guy who could topple empires. But as chief technology officer for President Barack Obama's reelection effort, Reed supervised a handpicked team of digital wizards who revolutionized election campaigns.

Throughout history, political parties have collected information on voters to gauge their views and target political messages. But in 2008, the Obama campaign took data mining to a new level by collecting morsels culled from online sources like email, Facebook and Twitter. Then they made history by using these platforms to mobilize supporters. In 2012, Reed's elite geek squad upped the ante by several orders of magnitude in scale and scope. The team built a high-tech platform — code name Narwhal — that mobilized an army of nearly a million volunteers and raised almost a billion dollars, much of it from small donations. It was Narwhal that got out the vote in unprecedented numbers by communicating with individual voters in the most personal of ways. In the end, Narwhal's apps and databases generated and analyzed millions of precious nuggets on voter attitudes and preferences. That enabled the team to get up close with tens of millions of Americans, delivering an unexpectedly lopsided presidential victory that left opponents shell-shocked. As one dejected Romney staffer told reporters, "They targeted voters we didn't even know existed."

Discover caught up with Reed at 1871 (named for the year of the Chicago Fire), a cavernous high-tech incubator in Chicago's Merchandise Mart just north of downtown that is home to 225 start-ups. The soft-spoken, 35-year-old Greeley, Colo., native talked for several hours over the course of two sessions about the ultimate revenge of the nerds.

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Q How did you go from tech guru to political transformer?

A I had done some volunteer work for Obama in 2008 and I was very much a supporter of the president. A decision was made by the Obama campaign to reach outside of their talent pool and comfort zone, and to hire people who were better at this than they were. So when Michael Slaby [the campaign's chief innovation and integration officer] recruited me, it just seemed like a tremendous opportunity to work on the presidential campaign and to have that experience. Transforming politics wasn't what was important.

Q Was it the technology itself then that was transformative?

A I think the real innovation was the team, not the technology, and the decision to bring people in-house from outside of politics. Previous campaigns had mostly outsourced technology to political vendors like Blue State Digital, a tech company that cut its teeth on Howard Dean's [failed presidential] campaign in 2004. In contrast, we brought people in from Google, from Facebook, from Twitter and from companies all around Chicago. We didn't want inventors or visionaries or anyone who was going to make things complicated. We just wanted people to come in, work their hardest, not require us to train them, and to aggressively execute.

Q In 2008, the Obama campaign's use of social media and online tracking tools expanded the Democratic Party's voter data information base by at least tenfold. But much of this information was siloed in separate databases or used a patchwork of software programs that weren't compatible with each other, which made it difficult to access, integrate and leverage the data. When you got involved, how did you break down these barriers?

A We spent a lot of time figuring out how to integrate databases that were all over the place. We needed to create a single software platform that would integrate and unify massive amounts of data that had been accumulated since the 2008 campaign — up to hundreds of millions of pieces of data from previous campaigns, from political canvassers, from the Democratic Party's databases on registered voters, from what people posted on their Facebook pages, or how they responded to email solicitations — so that we could easily access and use this information to target voters. We looked at what we could achieve pretty quickly, from a software perspective, using programs we were already familiar with and which we knew people would use, because we didn't have much time — only 18 months from the time I was hired until the election.

We also wanted to use the technology as a force multiplier, in other words, as a tool that made it easier for people to [volunteer and] get involved in the campaign and made it easier for people to vote and made the entire process more efficient. In 2008, I wanted to be involved, but I didn't know how, and when I did volunteer, I spent most of my time [in a field office] manually entering voter information on spreadsheets. This was important but tedious and inefficient. I wanted to solve that problem and make sure that if you wanted to get involved, that you could do it easily, and the only thing you would need is Internet access. We also wanted to find a way to talk to every person and make sure every person votes — and that includes all 200 million Americans who are eligible to vote.

Q Could you walk me through how you helped to create a grassroots effort that mobilized nearly a million volunteers?

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A We developed our product called Dashboard, which was a software tool that was designed to be a virtual campaign office to help volunteers communicate and collaborate through emails and interacting online. It was our attempt to take an offline field office and merge it online. This software portal automated recruitment and outreach to campaign volunteers, which is what made possible the deep penetration of the campaign. People could volunteer online and be connected with their neighborhood team based on where they lived.

The Dashboard technology allowed us to empower people to easily get involved in the campaign. Maybe they were in a rural area and couldn't participate through the normal channels. The only thing they needed was Internet access. We were able to give equal access [and equal ability] to participate in the campaign to my mom in Colorado, to a blue-collar worker in Virginia, to a white-collar worker in Florida. It even allowed a guy in a hospital to participate in the campaign without leaving his hospital bed.

Q Dashboard had several menu options, like "my team," "my messages," "resources," "numbers" or "events." So people could just log on, click on what they needed, and then get their personalized instructions at home rather than volunteering at a campaign field office.

A The Call Tool [an app that's part of Dashboard], for example, allowed thousands of volunteers to do phone canvassing from their home and pull up lists of people to call and a script that said, "Hey, call Linda. This is her number. This is where she lives. Here's a script to read when you get on the phone." And I like to think all of these people with iPads or Android devices or cell phones were able to use this and interact with it without leaving their house. [During the campaign], there was this picture of [U.S. Rep.] Debbie Wasserman Schultz (D-Fla.) using her iPad to use the Call Tool. And she can do that on a bus. She has a lot of technology in her hands. She can use lists [to make calls], and she can do this without leaving her house and having to go somewhere.

Dashboard also handled some of the metrics of the grassroots part of the campaign by tracking activities like phone calls to voters, voter registration or canvassing. The software allowed volunteers to quantify their work, to track how much they've done, to see if they're hitting their goals and to share best practices, tips and tricks. Then, they were able to participate, like call Nevada or knock on doors in Colorado. It was an attempt on our side to create a gateway to allow people to get into the offline world because you are much more productive if you actually go out. Dashboard was about empowering that community.

It also had a social networking application, sort of like Facebook, so that people could connect with other people in their neighborhood teams or their team leaders, and interact, like soliciting rides to events, that type of thing. The goal here was to allow people to organize in their neighborhoods where they are most comfortable, and work and meet with their peers and their neighbors. I live in an urban community, and I don't know my neighbors. Even though I built it, I would join in, and I saw people from the neighborhood, people I saw on the train, and you feel better when you know you're not alone. And having all these people around, you're able to say, "Oh, my neighbor over here across the street is also working on the campaign and helping out." That's really neat. We were able to get more people involved, to get out the vote, to get people out to go knock on doors.

Q The campaign also microtargeted voters by firing off emails or posting messages on Facebook that were shaped to appeal to their particular interests or causes using tracking software, similar to ones used by online retailers to craft ads. Is that how you were able to tailor political messaging to such a degree?

A The most important thing we did was listen. People forget to listen. We would watch and see what is important for people. What are people talking about right now? You don't need a software platform to do this. You can just watch what your friends are doing.

Q But you were watching what millions of your friends were doing.

A Yeah, there's a scale here. But even if you're talking about your regional Planned Parenthood, they would have a regional page, and they can see the activity and people's updates, which would give them a pretty good idea of what's happening and enable them to respond.

Q But when people donated to BarackObama.com, the campaign asked to harvest some of their Facebook data, which meant you had the names at least of their Facebook friends. Or you knew if they responded to Facebook postings or targeted email solicitations about specific issues. Every time someone

"liked" Planned Parenthood on Facebook, it registered with the Obama campaign. How was this information used?

A We also did it on Twitter, on Tumblr and even on Pinterest. We didn't know everything you were doing on Facebook. But if you shared something or uploaded a picture and tagged it as public, we could look to see what it says. We knew if someone was interested in health care or reproductive rights based on an Internet interaction on Facebook or a response to an email. Essentially, we used the technology to make sure you're the right person to receive a particular message. Then we'd ask people if they wanted to share this message. We'd look through his or her friends and ask, "Who are the most important people for us to share this with?" And from there, we would share with these people, which continually built our base. So if you were sharing something from the campaign, it would register on Facebook.

And with the content creation, and the postings, we tried to measure things. When you post this, what kind of clicks do you get? On Tumblr, how many re-blogs, or on Twitter, how many retweets? So if you go to our Facebook page [www.facebook.com/barackobama], you can see the response to postings. One that got posted about an hour ago already has 54,000 likes, and 3,000 people shared it. This way, we know which messages are the most effective.

Q On election day, campaign workers used a smartphone app called Gordon

LEFT: DANIEL PETER. RIGHT: DANIEL X. O'NEIL

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— named for the man who reputedly killed Harry Houdini — that allowed them to monitor who had already voted, and that helped get out the vote. People even reported receiving emails that asked them to call friends in battleground states who hadn't voted yet. How did you achieve this depth of penetration?

A Well, you have poll watchers, and you report that data in; whether you use our mobile app or you use paper, it goes to the field office. They fill it all out, hit submit, and it goes back to us [at campaign headquarters], so we can then start pulling out the data and continually refresh lists of people who have already voted in real time on election day. And we know who hasn't voted based on the voter registration files. Say [a watcher] is at the polls, and he says Harper has voted, so I get checked off. Then when someone logs in, we can look up their friends from Facebook and see if they voted. So then it's just about ordering it by state. Instead of looking at all of their friends, we just look at the friends that live in the battleground states. And if they haven't voted yet, we'll just ping them and say, "Hey, why don't you call these people?" We sent a lot of these — maybe around 7 million.

Left: Harper Reed, shown in late 2007, is hardly a suit-and-tie guy. Above: Reed at Obama for America headquarters in October 2012.

Q Your campaign techniques raise serious privacy issues. How do you know so much about each and every voter?

A That's a tough topic, and I think it was unfairly blown up for the campaign. You're talking about "violations," but we all agreed to participate in this world. When you use Facebook or Amazon, you agree to their terms of service and their data usage. And as a consumer, you can always not use it. It's the same with the campaign. We used publicly available data, such as information from voter registration files, and what was reported to the campaign by people canvassing their neighborhoods, as well as information posted on Facebook and what was given in response to email requests.

There's a new world of information management out there. People are building apps that are doing super-crazy things, and there's a lot of talk about modeling and microtargeting. Facebook can predict when people are going to break up, and Target is able to predict if a woman is pregnant before she knows just based on the type of lotion she bought. What we were able to predict — based on voter registration and campaign canvassing — is that if you knocked on someone's door, that person probably wasn't a Republican.

Q You don't think we're on a slippery slope with the campaign collecting all this data, leading toward a Big Brother type of world?

A No more than we are with Target or Facebook or Amazon or anyone else — a lot of companies are doing the same thing. And it's important to be clear that a campaign isn't just the government. That said, we have to be careful, and we can't just assume it's going to be OK. But I honestly don't think that it is as big an issue as I think a lot of people think it is.

Q You don't have trouble posting personal things online, like your weight, what you ate for dinner last night or lists of your favorite books — a very eclectic mix, ranging from heavy-duty sci-fi to Alan Greenspan, Ayn Rand, Kurt Vonnegut, Haruki Murakami and Barack Obama. It's almost like a life lived online.

A There's this old idea of "digital natives" where there are these people who are born into technology, and then others who aren't. But I think now just about everyone is a native. The few people who aren't are older and are usually people who have resisted going into this world. But even they are using computers.

What I do think is important is this idea of a "privacy native" where you grow up in a world where the values of privacy are very different. So it's not that I'm against privacy but that the values around privacy are very different for me and for people who are younger than my parent's generation, for whom it's weird to live in a glass house. But my 16-year-old cousin posts anything and everything on Facebook — it's just a different way of consuming privacy.

Q You think this debate is generational?

A I think it is, and this whole controversy about privacy being eroded on the Internet sounds like old people talking to young people about rock 'n' roll. Like society is going to fall apart. But the notion of privacy is different for people younger than 25 who grew up with Facebook their entire life. They have much more nuance and much more controlled interaction with their data than people who are older. So they do things like deactivate their Facebook accounts, or use things like Snapchat, where their content erodes. Yes, the old style of privacy is gone — but so is riding horses.

Q But what about the recent NSA/PRISM projects? The U.S. government, through the FBI and the NSA, was collecting call log data from millions of Verizon customers. It also was mining the servers of big tech companies such as Google, Facebook, Skype and Yahoo, collecting emails, videos, photos, social network profiles and even doing live surveillance of someone doing a Google search, as part of the war on terrorism.

A The first thing is — and this is very important — I support the unmonitored use of the Internet for everyone. It doesn't matter what country you're in or what you do for a living — everyone should have the right to an unmonitored Internet. Obviously, I support the president, but we need to make sure we're not sacrificing our freedom. We need more transparency and more insight into what's happening, and we can agree that what's happening is the right balance between stopping terrorism and having the freedom to have an unmonitored Internet, and making sure we're not searched with every click on the Internet.

Q Do you think this will trigger a privacy backlash that will affect data mining in the next election?

A This has very little to do with data mining and more to do with the fact that it is unrestricted, secret and not transparent. We very often participate in programs where we give up data in trade for something else. I got my retina scanned so I can go through the airport faster when I travel, for instance, or we go on Facebook to share photos. The problem with this is that it is completely secret, and none of us have a choice as to whether we can opt in to it. D

Linda Marsa *is a contributing editor for* Discover *and the author of* Fevered: How a Hotter Planet Will Hurt Our Health And How We Can Save Ourselves *(Rodale).*

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