Data You Can Believe In

The Obama Campaign's Digital Masterminds Cash In



Illustrations by Steve McNiven. Colors by Andy Cotnam and Simon West.

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Earlier this year, senior members of President Barack Obama's campaign team took a trip to Las Vegas. Nevada holds a special place in Obama-wonk lore as the place where his monthslong strategy of defeating Hillary Clinton by slowly and surely amassing delegates emerged. But the operatives were not there in March for any political reason. They were there to make money — specifically to land what they hoped would be the first corporate client for their new advertising business, Analytics Media Group (A.M.G.). Its bland name obscures its relatively grand promise: to deliver to commercial advertisers some of the Obama campaign's secret, technologically advanced formulas for reaching voters.

The potential client was Caesars. The casino chain was looking for ways to induce semiregular visitors to show up more routinely at its other casinos around the country and to keep regulars from defecting to new competitors. A.M.G. was making the pitch that keeping gamblers loyal to Caesars was not all that different from keeping onetime Obama voters from straying to Mitt Romney. It was all a matter of figuring out how to get their message in front of the right customers at the right time. It was not lost on the Obama strategists that the "change" they were talking about was not the kind "you can believe in" but rather the kind you can put in a slot machine. "I kind of felt like the Devil's advocate," Chauncey McLean, 31, the Democratic Party's director of media tracking during the campaign and now A.M.G.'s chief operating officer, wryly told me.

A.M.G. was founded in late December by a splinter group of longtime Obama advisers: Larry Grisolano, who oversaw how the campaign spent its advertising dollars; Grisolano's direct-mail partners Terry Walsh and Pete Giangreco; Jeff Link, a seasoned Iowa veteran who was an outside adviser in 2012; and Erik Smith, an advertising consultant for the 2012 campaign, whose work running one of the biggest 2004 pro-Kerry outside groups gave him an inside track with party donors from the corporate world.

McLean was their first hire. During the campaign he proved himself to be particularly deft at translating between the old hands of the political world, who talk about "message" and "narrative," and the quants in their 20s, who speak of "code" and "algorithms."

McLean was so moved by Obama's 2004 convention speech — the one that called for an end to a red-state America and a blue-state America — that when Obama decided to run in 2008, he took a leave from law school and joined the campaign. He had just spent the last 18 months of the 2012 presidential race bouncing between a couch in Washington and a small, shared apartment in Chicago where a colleague slept in the dining room. So he was experiencing considerable culture shock in the high life of Vegas.

Arriving at Caesars Palace after a first-class flight (only the second of his life), he was shown to his room. "I open the door and there's just this huge, like, double, wall-to-wall window with a view of the strip and a huge king bed," he said. Over room service, he met with his deputy, Chris Frommann, now 26, and made some last-minute revisions to their proposal. McLean took an iPhone picture of his kung pao chicken and sent it to his wife back in Brooklyn, "to show her that I'd made it," he joked. The next morning McLean, Frommann, Grisolano, Smith and a couple of others were escorted through a maze of doors that led them to the casino's marble-and-glass executive offices, where their meeting went well enough that they scheduled another, to discuss a deal. Later that night they celebrated with a red-meat-and-red-wine dinner at Old Homestead, Caesars' upscale steakhouse.

Recalling that Vegas trip while sitting at a MacBook Pro-dotted coffee shop in Brooklyn in March, McLean treated his shift from selling Obama to selling Caesars as a small discomfort that was necessary if he wanted to keep working on the technological advancements he and his colleagues developed on the campaign. In a nonpresidential year, no political effort would have the money to finance what he described as the "huge R.& D. project" that the Obama campaign effectively became. The resources for that kind of project could now be found only in corporate America. If companies with big budgets wanted members of Obama's team to do for them whatever it was that they did for the president, McLean couldn't see why they shouldn't answer the call.

Political marketing has usually lagged behind commercial marketing. Companies that spend billions of dollars a year developing ways to make many more billions of dollars a year tend to have little to learn from presidential campaigns, which are generally start-ups aimed at a one-day sale. But the (re)selling of the president, 2012, was an entirely different matter. The campaign recruited the best young minds in the booming fields of analytics and behavioral science and placed them in a room they called "the cave" for up to 16 hours a day over the course of roughly 16 months. After the election, when the technology wizards finally came out, they had not only helped produce a victory that defied a couple of historical predictors; they also developed a host of highly effective marketing techniques that were either entirely new or had never been tried on such a grand scale.

Grisolano and McLean and the others were part of a singular breakthrough in the field of television-ad buying, where about 50 percent of the campaign's budget was spent, or more than \$400 million. Previous campaigns would make decisions about how to direct their television-advertising budgets largely based on hunches and deductions about what channels the voters they wanted to reach were watching. Their choices were informed by the broad viewership ratings of Nielsen and other survey data, which typically led to buying relatively expensive ads during evening-news and prime-time viewing hours. The 2012 campaign took advantage of advanced set-top-box monitoring technology to figure out what shows the voters they wanted to reach were watching and when, resulting in a smarter and cheaper — if potentially more invasive — way to beam commercials into their homes. The system gave Obama a significant advantage over Mitt Romney, according to Democrats and many Republicans (at least those who were not on Romney's media team). Now A.M.G.'s founders say the company is at the forefront of a move to turn upside down the way the

\$60-billion-a-year television-ad market has functioned since its start. And they hope to get very rich in the process.

That is essentially the pitch Grisolano began making just before Christmas to the tech whizzes he needed to hire to rebuild the system they used during the campaign. He also offered profit sharing and salaries often commensurate with those being offered by Facebook or Google, who were also recruiting from the Obama campaign.

"You're sort of involved in this cutting edge of something and see this whole thing on the horizon changing," Grisolano recounted telling them. "I think that's exciting."

McLean, for one, was primed to hear his message. When the election was won last fall, he asked Jim Messina, Obama's innovative campaign manager — and ardent tech advocate — what he should do with his life. As McLean tells it, and Messina affirms, Messina said, "I'd either go out into the country and run a campaign or I'd go make a load of money."

A couple of weeks before Election Day, over drinks at the Pump Room in Chicago's Gold Coast, a safe distance away from the re-election headquarters and its press minders, Grisolano and Erik Smith first let on that there was far more happening in the Chicago campaign office than any of us covering it truly understood. Grisolano told me that the campaign literally knew every single wavering voter in the country that it needed to persuade to vote for Obama, by name, address, race, sex and income. What's more, he hinted, the campaign had figured out how to get its television advertisements in front of them with a previously inconceivable level of knowledge and accuracy.

Grisolano, a gruff and stocky Iowan, spent years in the shadow of his mentor, Obama's founding strategist, David Axelrod, happily so, but he now seemed eager for his own recognition. There was also no mistaking that he believed he had figured something out that would be worth a lot of money after the election. He wouldn't say more, at least not then. But after the election, in February, he began to describe his new business venture to me in detail.

To understand how it works, you must first understand the vast technological engine that powered the campaign but remained largely out of view of the public and the press. Messina, the campaign manager, often boasted about how the Obama 2012 effort would be "the most data-driven campaign ever." But what that truly meant — the extent to which the campaign used the newest tech tools to look into people's lives and the sheer amount of personal data its vast servers were crunching — remained largely shrouded. The secrecy around the operation was partly because the president's strategists wanted to maintain their

competitive edge. But it was also no doubt because they worried that practices like "data mining" and "analytics" could make voters uncomfortable.

Using data wasn't new for the Obama strategists. The 2008 campaign developed the most sophisticated system to date to identify tens of millions of voters and place them into useful categories: those most likely to vote Republican, who would be ignored; those supporting Obama - and how likely they were to vote. That system - based on a complicated scoring method that relied on the processing of reams of data - was first devised by an outside consultant, Ken Strasma. But it was partly managed inside the campaign by an economics forecaster, Dan Wagner, who, at 24, helped perfect it for the campaign's use. Wagner, who was recruited by A.M.G. but decided to start his own venture instead, seems to exist in two realms. One is digital, where he operates like a Dungeons and Dragons dungeon master, trying to shape the rules to the reality he is creating ("I was a Level 14 wizard or something," he jokes of the fantasy role-playing game). The other is corporeal, where he is selfdeprecating about things like his romantic life. ("Hey, I do 'Big Data,' " he says.) His work on the 2008 campaign has been portrayed in a book, "The Victory Lab," by Sasha Issenberg. "Here's where I am in the 'Victory Lab' – blah, blah, blah," he said dryly while turning to his chapter in the copy I was carrying when we met for breakfast at the Ace Hotel in Manhattan one day in May.

Wagner dismisses the notion of "romantic war rooms" operating on political gut instinct as outdated and misguided. His is a hard-data system that rejects anything that is not definitively quantifiable. In the Bush era, strategists boasted about how they could predict voter behavior based upon car and sport preferences, a well-publicized bit of political magic that captured the imaginations of politicians and journalists alike. Wagner's approach, part of a broader move in politics, cut all of that out; why engage in such divination when you have the time and money to just call voters and ask them about their leanings directly? "We're trying to predict political preference; we're not trying to predict whether you buy a car," Wagner says dismissively.

The campaign couldn't call the more than 150 million registered voters, obviously. But they could call enough of them in swing states (up to 11,000 a night) to figure out how they — and other people who lived near them, looked like them and earned like them — were likely to vote with an increasing degree of accuracy. In 2008, Wagner and his small team combined information from those calls with any other data they could find — census data, state voter lists and the like — and fed it into algorithms that produced support scores. One ranked how likely swing-state voters were to support Obama on a scale of 0 to 100, and another ranked how likely they were to show up at voting booths. Those scores helped the

campaign direct resources toward the right voters, and Obama beat John McCain by 7 percentage points.

But even before the president took office, as the economy was in meltdown, his strategists, looking ahead four years, assumed that his re-election would not be easy. Wagner was assigned to the Democratic National Committee headquarters, where he set out to develop a far more sophisticated version of his analytics system, using bigger computer servers, better data on the nation's voting-age population and more precise algorithms.

If there was any doubt about the system, it was dispelled after the 2010 special election in Massachusetts for the U.S. Senate seat left vacant by Edward M. Kennedy's death. For much of the campaign, pollsters for the Democratic candidate, Martha Coakley, showed her ahead. Wagner and his group had their own numbers indicating that Coakley's support was soft and dropping. His warnings went up the chain to the president, but some strategists dismissed him as if he were a "'dumb kid,'" Wagner told me.

After Coakley lost and Wagner's methods were validated, the Democratic Party poured money into Wagner's department, which grew from 2 people to 15. Later that year, Wagner's team developed the prototype for what Messina says he considers "an evolutionary jump": a newly robust and reliable "persuasion score" that identified how easily individual undecided voters could be persuaded to vote for or against the Democrat in a race, based on how likely they were to show shifts in their preferences in telephone interviews conducted over time.

When Messina started up the Obama re-election campaign in 2011, he gave Wagner the goahead to nearly quadruple his team, which was moved to the cavernous office space at the Prudential Center in Chicago. This immediately made his analytics department one of the biggest of its kind in the country.

Obama supported the idea, aides said. But he warned in one early meeting against getting too deep into the data and "slicing the salami too thin," as his communications director, Dan Pfeiffer, put it to me.

Soon after the office opened, Wagner's group moved into a separate, windowless room, the cave. Messina said he wanted them to lose all sense of time and to focus. Wagner also cited the secret nature of the work. I once unknowingly wandered near the cave, looking for a bathroom, and a young press aide chased me down and escorted me away. (Because it was also near the kitchen, at the time I thought the aide was concerned I might try to force a metaphor out of an exposed piece of rotting fruit.)

"Anybody who had a computer and a basement as a kid saw the cave as a real opportunity," Wagner told me. It was packed with about 40 desks, a number that was determined through a contest Wagner held among his staff to figure out how to "best utilize the floor plan." The result came from "the best combination of square footage per person, subject to constraints: You couldn't move your arms more than six inches without hitting somebody," he said. On the back of the door his team would affix pieces of paper with snippets of conversation they heard from people who walked by: "Those people are weird, don't go in there" or "That's the secret sauce." Across one wall there was a large printout of the surface of Mars, a mocking reference to a column in The Wall Street Journal in which Peggy Noonan described a job posting of Wagner's as "politics as done by Martians."

In fact, through his postings, Wagner assembled a team that included a biophysicist, who worked at the Stem Cell Initiative at Harvard and three professional poker players. The cave dwellers would take breaks at the Ping-Pong table out in the main offices with their peers; Gaurav Shirole, a 23-year-old data analyst and graduate of the business school at the University of California, Berkeley, who also joined A.M.G., became so good that when the president visited the campaign office during the summer, the staff volunteered Shirole to compete against Obama. (Shirole won, but got in trouble with his mother when she saw the photo of him playing in flip-flops and a T-shirt.)

Yet in truth, their task was daunting. Shortly after Messina opened the Chicago offices, Joel Benenson, the president's national pollster, conducted a "benchmark" poll that had some sobering results. Roughly a fifth of Obama's 2008 vote had shifted into the undecided column. "We knew we weren't going to get all of them," Benenson said. But the campaign needed to get back many millions of them. And it fell to Wagner's team to figure out exactly who they were, to a man and to a woman, and then rank them according to a 0 to 10 persuasion score.

As the denizens of the cave were setting out to do that, the digital-analytics team, led by Rayid Ghani, a 35-year-old research scientist from Accenture Labs, developed an idea: Why not try sifting through self-described supporters' Facebook pages in search of friends who might be on the campaign's list of the most persuadable voters? Then the campaign could ask the self-identified supporters to bring their undecided friends along. The technique, as they saw it, could also get supporters to urge friends to register to vote, to vote early or to volunteer and donate.

Identifying persuadable friends became a significant undertaking. "We ended up building it from scratch because nothing like that existed," Ghani told me. The computer code alone was thousands of lines, said Will St. Clair, 25, who helped write it and who also now works with McLean at A.M.G.

The campaign didn't go into much detail, at the time, about exactly how it used Facebook. But St. Clair put it in fairly stark terms when I talked to him at A.M.G.'s temporary offices in Williamsburg, Brooklyn, in April. They started with a list that grew to a million people who had signed into the campaign Web site through Facebook. When people opted to do so, they were met with a prompt asking to grant the campaign permission to scan their Facebook friends lists, their photos and other personal information. In another prompt, the campaign asked for access to the users' Facebook news feeds, which 25 percent declined, St. Clair said.

Once permission was granted, the campaign had access to millions of names and faces they could match against their lists of persuadable voters, potential donors, unregistered voters and so on. "It would take us 5 to 10 seconds to get a friends list and match it against the voter list," St. Clair said. They found matches about 50 percent of the time, he said. But the campaign's ultimate goal was to deputize the closest Obama-supporting friends of voters who were wavering in their affections for the president. "We would grab the top 50 you were most active with and then crawl their wall" to figure out who were most likely to be their real-life friends, not just casual Facebook acquaintances. St. Clair, a former high-school marching-band member who now wears a leather Diesel jacket, explained: "We asked to see photos but really we were looking for who were tagged in photos with you, which was a really great way to dredge up old college friends — and ex-girlfriends," he said.

The campaign's exhaustive use of Facebook triggered the site's internal safeguards. "It was more like we blew through an alarm that their engineers hadn't planned for or knew about," said St. Clair, who had been working at a small firm in Chicago and joined the campaign at the suggestion of a friend. "They'd sigh and say, 'You can do this as long as you stop doing it on Nov. 7.'" (Facebook officials say warning bells go off when the site sees large amounts of unusual activity, but in each case the company was satisfied the campaign was not violating its privacy and data standards.)

By March 2012, Wagner's team had a workable list of what it deemed to be the most persuadable voters — in total, roughly 15 million of them in the swing states. Messina ordered the campaign to direct a majority of its efforts toward winning them back, one by one if necessary. They could reach many through their Facebook friends and others through more conventional means like e-mail and knocking on doors. But how could the Obama campaign be as targeted and tech-savvy on TV?

The Internet, and specifically social media, may have fundamentally changed politics, but there is still nothing with the power to enrage or inspire like a well-produced television ad (see "47 percent, Romney"). This is in part because of the evocative nature of video, which can be transmitted over the Internet as well. But it's also because that imagery

is typically put in front of people when they are at their most receptive, zoning out on the couch, relaxing, their defenses down.

TV advertising has also historically been the most expensive and least efficient way to reach voters. Commercial TV time is still valued and sold in pretty much the same way as it was when people gathered every night to watch Walter Cronkite. Most advertising is based on audience ratings kept by Nielsen Media Research, which derives its information from a national survey of 22,000 households and smaller surveys in local markets, selected to perfectly represent the American television-viewing population, Nielsen says. Through "people meters" that monitor what specific members of these households are watching in real time and, in some cases, written diaries of its participating families, Nielsen does a reasonably good job of telling advertisers which demographic groups are watching which shows. Nielsen's ratings categories are still dominated by the broad audience segment known as "adults 18 to 49," but they can also include smaller groups like "women 18-plus" and "Hispanics." If Revlon wants to sell its newest shade of lipstick, for example, it knows it can reach lots of women through a show like "Grey's Anatomy." If Miller Lite wants to get its shiny blue cans in front of young men in their beer-drinking prime, it knows it can do so through spots on "Jimmy Kimmel Live."

Political campaigns have typically shown most of their ads during news programs, where they can reach older viewers who are engaged in the topics of the day and, it stands to reason, are most likely to vote. If a pollster identified other broad groups that a candidate wanted to reach, like women or young men, then the campaign could venture out into other shows. Traditionally, "these are the tools that you have," Grisolano told me one day at his office in Chicago, the L train screeching along the rails outside. "You have programming that overdelivers or underdelivers in broad, sweeping groups."

The better that campaigns — and all major marketers — have become at identifying precisely whom they want to talk to, the more inefficient the old model can seem. For instance, a campaign may need to win over those 5 percent of independent, female, likely voters who are still undecided, but there is no separate ratings category for them, no precise way to know which shows they are watching. It's very likely a campaign can speak to some of them through commercials on "Grey's Anatomy," but by buying time there, the campaign is spending a lot of money on an audience that is mostly made up of people the candidate actually does not need to speak to.

The 2012 Obama campaign knew it had to be especially efficient in buying television time because it expected to be outspent by the combined forces of the Romney campaign and super PACs, including the American Crossroads organization, co-founded by Karl Rove.

"If we had to withstand being outspent — and nobody wanted to withstand it — but if we had to, we could tolerate being outspent with the people who have basically already made up their mind for us or the people who made up their mind against us," Grisolano said. "But we were going to make sure that we put the full power of our buy with the people who were swing voters, who were on the edge. So, my task became, how do you create the tools you need to make that a reality?"

Grisolano was going to have one thing at his disposal that no presidential adviser had before him: Wagner's list of roughly 15 million persuadable voters. But he had no way of knowing if he would be able to reach them with any real precision on TV. He turned to Amy Gershkoff, a young political scientist he met a couple of years before who was making a name for herself grappling with just these sorts of challenges. Gershkoff was 30 years old, had a Ph.D. from Princeton and had developed software that was making political ad buying more efficient. Gershkoff was digging more deeply into the Nielsen data and matching it against information in party-voter lists to get a better read on what shows key voting blocs — not generic television audiences — were watching. She was finding that a campaign could reach many of them in greater concentrations and for less money on cable channels like Lifetime than on more expensive shows with bigger audiences like "The Office."

Grisolano recommended that Messina speak with her, and Messina hired her to be director of media planning, reporting directly to him. Messina wanted Gershkoff to build a master program that would allow him, as the campaign manager, to decide how to spend the campaign's advertising budget across all mediums — not just television, but the Internet, radio, print ads and the mail — at optimum cost using real-time polling data to measure how the ads were moving or not moving opinion. (A version of this project would be built by McLean, whom Gershkoff brought with her, and Frommann, his deputy.)

But it soon became clear that such a system could eliminate the role of Obama's longtime television-ad-buying firm, GMMB, run by the senior Obama strategist Jim Margolis, which stood to potentially lose millions in buying commissions. Colleagues described Margolis as furious. He called it "dumbfounded." Grisolano and Axelrod backed him up in his argument that any savings on commissions would be wiped out in the chaos of recreating a system that already existed (and forgoing the expertise and relationships that Margolis's 30-person buying team had in the television world).

Messina relented, but said that GMMB would take guidance from Gershkoff's department. As Gershkoff put it to me gingerly when we spoke in May: "Fundamentally I was brought in to create tools that would help Jim spend nine digits' worth of the campaign's budget. Any time you're moving that kind of money around, people can be resistant to the idea." There were other turf battles. Gershkoff was given her own analytics department to analyze media, but Wagner believed all analytics should be handled uniformly through his department, several former campaign officials said. (He wouldn't discuss it with me when I asked about it.) The two had differences in other areas as well. Gershkoff insisted that her staff members wear business attire; Wagner, who often wore flip-flops, had only one requirement of his staff in the cave: "You have to wear clothes."

But Gershkoff had come upon a cache of data that all the strategists would come to appreciate. She had contracted with a relatively new firm called Rentrak that was competing with Nielsen and was buying up real-time, raw viewing data directly from cable and satellite companies that had nearly 20 million set-top boxes in eight million homes. When Gershkoff told Grisolano, he was thrilled. Rentrak's huge new trove of data, he surmised, could help him find out with relative certainty what shows were being delivered to the homes of the roughly 15 million persuadable voters Wagner's department had identified.

The concept for the "optimizer," as it was known in the campaign, was born: a system that could determine with more precision than ever what swing voters were watching in the greatest concentrations and how to get commercials in front of them in the cheapest advertising time slots possible. But making that idea a reality was going to be very difficult. "My first idea was, O.K., I've got a list of people who I know are targets here," Grisolano said. "I've got a list of viewers and what they watch over here. Just match them up and spit out what TV shows my targets are watching." He acknowledged that "what I didn't necessarily fully grasp in my enthusiastic naïveté was that the size and magnitude of these data sets are apparently extraordinary, and the engineering feat of doing what I wanted to do was a lot more complicated than I envisioned it."

That task would not ultimately be overseen by Gershkoff. By the end of 2011, she left the campaign, her tenure cut short by a family emergency, she said. When she re-emerged that spring, it was as the director of global analytics at the public relations and advertising firm Burson-Marsteller.

Responsibility for building the optimizer was handed off to Wagner. "We took over in January and then had to build it from scratch, completely from scratch," he said. Fortunately, there happened to be a rare expert in set-top-box data, named Carol Davidsen, working in the cave. Davidsen looks younger than her 37 years — "no kids," she says — and she speaks in a rapid, elliptical manner, as if her thoughts are running too fast for her sentences to keep pace. Before joining the campaign, she had a successful career as a forward-thinking data engineer. But she had become fed up with corporate life by the time she received an unsolicited e-mail from Wagner's analytics department, which recruited employees by searching the 2008 online-donor list for those who listed themselves as programmers. "I'm a huge supporter of Barack Obama," she said a few weeks ago at Think Coffee in Greenwich Village. "But I also was kind of at a time in my life where I needed to be part of a perfect team, and I knew that was possible in a world where people weren't worried about getting a raise or people weren't worried about getting a promotion."

Her previous employer, Navic Networks, was a very early pioneer in the field of set-top-box data collection. And she was one of the early programmers to figure out how to make a television, designed as a one-way path for sending programming into American homes, relay information back about what exactly a viewer was watching.

Davidsen determined that Rentrak could roughly do what Grisolano wanted it to do: produce data that could be checked against Wagner's list of most-persuadable voters to find matches. Rentrak had access to the set-top boxes in the homes of thousands of the targeted voters in every competitive market of every swing state. (For instance, Rentrak had 100,000 people in its Denver sample, some 20,000 of whom were on the Obama list; Nielsen had a total of 600 people in Denver.)

But there was the potentially politically explosive matter of privacy. Unlike Facebook, where users were at least giving the campaign explicit permission to collect personal data even if they had not read the fine print, television watchers were making no such agreement. To address this, the campaign and Rentrak hired a third party to "anonymize" the data so that they would only know that the information was coming from a set-top box of somebody on the persuadable list; identifying information would be stripped away.

The optimizer software would then comb advertising price and viewership data to figure out the top-rated time slots among those on the Obama persuadable list — which could vary from market to market — and then rank them based on which produced the highest concentration of the Obama swing voters at the best rates. The results were striking. The campaign determined that two of the top shows to buy were 1 a.m. repeats of "The Insider" and afternoon episodes of "Judge Joe Brown" — shows that were far cheaper than the evening news or anything being shown on the networks in prime time. "When you're talking about 'The Insider,' that might be shift workers in a state like Ohio, folks who are working class and aren't getting home until midnight," said Daniel Jester, the head GMMB buyer, who was aggressively locking in low rates early. "The person watching 'Judge Joe Brown' in the afternoon also may be the same viewer watching 'The Insider' at 1 a.m."

The Romney campaign was not pursuing these same voters the same way. If they had been, Davidsen told me, the market would have become competitive, prices would have spiked and the system would have lost some of its advantage. As far as the Obama team was concerned, the optimizer helped it do what most strategists deemed impossible in a campaign between two well-financed opponents — talk to undecided voters through television advertisements on shows on which the opposition was not running a counter message.

By Election Day, the Obama campaign had done far more to utilize cable and to run ads at odd times of day — who watches "Area 51" on Syfy at 2:30 a.m.? — than Romney had. In all, Obama ran nearly twice as many cable ads as Romney did, 588,006, on more than twice as many channels, 100, according to analysis by NCC Media, which helped both campaigns place spots.

It is not that the Romney campaign was unaware such technology could be developed. Rentrak, a nonpartisan vendor, reached out to offer its services in the spring of 2012 but found no takers. The former Bush strategist Sara Fagen worked with the Romney consulting firm TargetPoint to develop a competing optimizing service, but, she said, the media team "chose not to use it." (She is now working with some TargetPoint colleagues to develop one for a new company they are forming, Deep Root Analytics.)

Stuart Stevens, Romney's chief strategist, said the campaign used plenty of data to inform its television buying. But as far as he was concerned, Fagen was one of many offering some new service. The Romney campaign, he said, had a different mission than Obama's. "We still were trying to inform likely voters who Mitt Romney was," he said, "and until you get those voters, you're insane to go off and say, 'We're going to try to win this with left-handed Lithuanians.'"

In the end, an analysis by the Republican ad-buying firm National Media found that Obama paid roughly 35 percent less per broadcast commercial than Romney did. Kantar Media CMAG, an ad-monitoring firm, showed that Obama and his supporting super PAC got nearly 40,000 more spots on the air than Romney and his super PACs did despite spending roughly \$90 million less.

The day after Obama won 51 percent of the vote, he visited his Chicago staff, including those on the analytics team. Davidsen said Obama hugged her and signed a favorite piece of cave paraphernalia, a replica of a narwhal tusk. "An honor," she said.

When the campaign ended, Obama's team of tech experts did not exactly knock down the door of the White House personnel office looking to put their newfound tools into the service of the new presidential agenda. They were heading East and West — to Silicon Valley, Wall Street and, in the case of A.M.G., Las Vegas — in search of venture capital and clients.

There is, of course, a tradition of political operatives leaving presidential campaigns to cash in on the corporate side. This has often been to join the public-policy campaigns of a given industry or company between political bouts, or perhaps to help with some brand and image management.

But there is just as much of a tradition in Democratic politics, especially among the young, to keep the fight alive after a campaign's end. The young staff members of the McGovern campaign left that particularly demoralizing endeavor to re-engage with their causes and their party; the Web-pioneering Deaniacs went on to feed the ranks of MoveOn and the 2008 Obama campaign.

The Obama political movement had tended to hold itself apart from the corporate world, its members galvanized by what they saw as an opportunity to change the country. But after Election Day in November, huge political success met financial opportunity. The people in their 20s and 30s from the Obama tech team had seen others just like them get incredibly rich on innovations (Facebook, Twitter, etc.) that were as transformational as anything they could hope to achieve in government. Now they started to think about what innovations they could bring to the market.

A.M.G. may be the most baldly commercial of the new crop of companies coming out of the cave, but they are all trying to translate what they learned there into future success. A few weeks ago, Wagner announced he was starting a new firm called Civis Analytics with an investment from Eric Schmidt, the Google executive chairman, who was a technology adviser during the campaign. As Wagner described it to me, he would use analytics to help nonprofit and for-profit companies reach out to segments of the population they were struggling to connect with. One of his first clients is the College Board, which runs the national SAT test. Civis will identify "kids who are low-income, high-achieving but not meeting their college potential." The "commercial applicability is wide," he said, so the company will not be averse to working with big, for-profit companies of all kinds.

Carol Davidsen was also recruited by A.M.G., but she decided to take the lessons of the Obama campaign in a different direction. If anything, her approach is almost anticorporate, even though she said she was not against getting rich if she could. Her company, called Cir.cl, which she founded with a campaign programmer, Joshua Thayer, endeavors to find people with complementary interests who may have reason to do business with each other, like parents with baby equipment to dispose of and parents-to-be in the market for that equipment. She calls it "recommerce."

"I have a lot of friends with kids," she said one recent Friday at her new office, a bouncy-ball and Mac-strewn onetime closet space in an industrial building in Downtown Brooklyn. "There's this little plastic play house. Does every single one of those need to go into a garbage dump? Why did we give up on doing business with each other? Why is it always to big corporations? It doesn't have to be." Explaining her choice to me, she said, "I don't want to spend my time optimizing for Coke."

When I talked to Chauncey McLean in Brooklyn in April, he walked me through how the campaign's technological achievements could translate into services provided to private businesses, like Caesars. The casino had gobs of data on its customers. "We have a giant list of people, and we need to make a model of likely customers," he said. A.M.G. would break them down along a range of Caesars Scores, à la Wagner's persuadable scores. Then A.M.G. could work through it and direct advertising toward those whose visits had fallen off: find what they watch via Rentrak in the greatest concentrations and then ply them with TV advertising.

Over several meetings with McLean and his young A.M.G. staff members, I asked them to talk about the switch in mission from getting Obama elected to helping Fortune 500 companies sell stuff. Will St. Clair, who helped write the campaign's Facebook program, said he saw himself as a programmer first and foremost and only joined A.M.G. after deciding that he didn't want "to play the Internet start-up billionaire game, which is a lot less fun than it looks on paper." Gaurav Shirole said he was considering a job in the Treasury Department when McLean approached him. "I'm a Silicon Valley kid, so the start-up bug has been there forever."

Frommann acknowledged having ventured into politics with a certain idealism. "We've all watched 'The West Wing,' like, four times, and we want to do our small part to change the world," he said. Politics, he said, was emotionally satisfying. Corporate clients meant new data sets, "stuff I haven't worked with before, intellectually that's interesting to me."

Still, it was hard not to detect some deeper disappointment about what was possible in politics. Frommann told me that in 2010, shortly after college, he joined the Social Security Administration. Within a year, he had helped develop a new system that, he said, would have saved the administration as much as \$1 billion a year. Just as his idea was gaining traction, his entire unit was disbanded, the ostensible result of budget cuts but also, he surmised, bureaucratic infighting. Sometimes, he said, it seems as if political life can be as much like "The West Wing" as it is like "House of Cards," the Netflix show about a conniving member of Congress living in a kill-or-be-killed Washington.

McLean says Grisolano wooed him by awarding him with the title of chief operating officer and wide latitude to hire whomever he needed. He was also drawn to Grisolano's sales pitch that the optimizer approach could prove a disruptive force in a \$60 billion commercialadvertising industry. It spoke to the same desire to be part of something big that led him to join the first Obama campaign. "This is going to be a huge deal, right?" he said "It's a multibillion-dollar industry, and we're going to change the way that it works."

He said his work at A.M.G. would also help provide the Democratic Party with even better tools three years from now, when he and his colleagues say they want to be involved in 2016. "We're going to bring it home," McLean said.

But for now, he does not seem to miss Washington. "I respect everybody who's working for the president — right? They're incredible kids — incredible people — but you have a limited movement, because you're hamstrung; the House is the House," he said. "When you go where the money is and you go where people get reached, you have a transformational effect. Money creates change."

<u>Jim Rutenberg</u> is a national political correspondent for The New York Times. Editor: <u>Ilena Silverman</u>.