Public Media 2.0 Field Report:
Building Social Media Infrastructure to Engage Publics:
Twitter Vote Report and Inauguration Report '09

Nina Keim, Research Fellow
Jessica Clark, Research Director
Center for Social Media, American University

Updated: October 2009

Since early 2008, American University's Center for Social Media has been producing a series of field reports that profile innovative media for public knowledge and action. Published as part of the Center's Ford Foundation-supported Future of Public Media project (www.futureofpublicmedia.net), these case studies are designed to explore how publics form around participatory and multiplatform media projects. In this report, Nina Keim and Jessica Clark examine two linked projects related to the 2008 presidential election: Twitter Vote Report (TVR) and Inauguration Report '09 (IR09).

Briefing
This field report traces how a committed group of volunteers harnessed the micro-blogging tool Twitter to create innovative public media 2.0 experiments—first to actively engage users to report on their voting experiences in the 2008 U.S. election, and then to document their experiences of the 2009 presidential inauguration. Along the way, these two projects demonstrated how journalists and advocates can effectively leverage a range of both commercial and open source social media tools to organize, publicize and implement citizen reporting projects, creating infrastructure for related future projects. Organizers have since worked to archive and repurpose the code and collaboration materials from these efforts for use in 2009 election monitoring initiatives in India and Iran.

Background and Mission
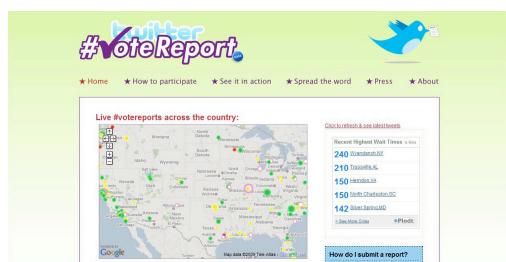
Twitter Vote Report (TVR) was an all-volunteer nonpartisan online project designed to encourage voters in the 2008 U.S. presidential election to submit brief accounts of their voting experiences using mobile and online tools. Developed in less than a month, the project generated more than 12,545 submissions, marshaled more than 7,500 contributors, and involved nearly 20 highly skilled volunteers and partners.

While such rates of participation may seem low given that an estimated 131 million Americans voted, this project was notable for a number of reasons. TVR marked the first nationwide experiment using the micro-blogging platform Twitter (www.twitter.com) for election monitoring and reporting directly by citizens. It brought national media outlets, government transparency advocates and voter protection organizations together for an unprecedented collaboration that married crowdsourced reporting with election monitoring. It built upon previous national social media experiments, cementing relationships among highly skilled social media developers. And it provided a model and an online toolset for related efforts around the world.

Throughout 2008, Twitter—a privately funded social media website that allows users to submit and share 140 character posts (or "tweets") online or via SMS—had been gaining momentum as a tool for reporting, mobilization, and electoral commentary. The lack of discussion about how Twitter could be used to help citizens communicate with one another on Election Day intrigued Nancy Scola, associate editor at the Personal Democracy Forum's techPresident blog, and Allison Fine, a senior editor at the Personal Democracy Forum and senior fellow at Demos. This led them to draft blog post about it, which became the genesis for TVR.[1] As the two project founders wrote, "[F]or far too long, the job of election protection has fallen largely to lawyers schooled in election law. But there's an opportunity before us right now and through Election Day for thousands, if not hundreds of thousands, of citizens to identify and rectify voting problems in real time." The post immediately generated excitement in the technology and government transparency communities, and volunteers with considerable programming skills began to emerge.

Three of those volunteers—Andy Carvin, the senior product manager for community at National Public Radio; Andrew Turner, the chief technology officer at GeoCommons, and Deanna Zandt, a media technologist and social media consultant—had already been working independently on another effort that used Twitter to involve citizens in reporting. The Hurricane Information Center project[2] was designed to provide users with ways to communicate via mobile and social media platforms during the potentially catastrophic hurricanes predicted for 2008. This project was itself an outgrowth of a social media communications system that had been cobbled together in response to Hurricane Katrina. They had not quite figured out how to use their infrastructure for the national election and enthusiastically agreed to join forces with the nascent network that Fine and Scola had created as a result of their blog post.

The initial TVR feature set was based on Twitter "tags"—short codes preceded by a hash mark (#) that allowed related messages to be aggregated. Users were asked to submit tweets that contained several possible hashtags. The codes included a basic identifier that linked all submissions together (#votereport), a location tag expressed as a zipcode (#12345), and various codes to mark common voting issues or experiences, (#machine, #wait, #good, #bad, etc.).

As the project developed, a range of individuals and organizations (see the partners list below) stepped up to help shape the routines and tags for voters to log voting conditions on Twitter. Based on conversations with the Election Protection Coalition—a nonpartisan organization formed to ensure that all voters have an equal opportunity to participate in the political process—it was decided that serious legal issues could be marked with #EP and a 2-digit state code to signify the need for legal help on the ground. Mapping and plotting of voting wait times using platforms such as Google Maps and Plodt kept the visualization volunteers very busy. In addition, a "sweeper" interface was

developed by Cory Forsyth and Sanford Dickert, which allowed volunteers to scan incoming data and clean up tags so that the submissions could be displayed more accurately in the visualizations.

In the spirit of open access, the technology team developed three additional ways to submit vote reports: by text, an 800-number and an iPhone application. To spread the message about the project, the volunteers created a public Web site[3], designed TVR T-shirts, promoted the project to reporters and bloggers, created an instructional video, and worked to tie the project to other poll monitoring efforts around the country.

In addition, the team created multiple open data feeds of the raw data collected by the project, thereby allowing other developers to integrate it into other projects and even create new interfaces. Based on the raw data, Nathan Freitas created a "TVR Widget," which later became the primary way for other Web sites to feature the project. The widget was extensively used by NPR partners, bloggers and partner sites to visualize filtered subsets of the data.

Communication throughout the planning process was almost entirely based online. The volunteers set up a planning Wiki[4], created a Google discussion group[5] and regularly held conference calls to discuss the next steps of the project and provide feedback. These Web 2.0 coordination tools not only helped the organizers and volunteers to exchange updates on software developments, current press coverage, and partnerships prior to the launch, but was also a communication channel to motivate and congratulate volunteers for the outstanding effort once Election Day came. On November 4, 2008 Allison Fine enthusiastically posted to the Google group: "Dixville Notch is voting in NH, so that day is finally here! What a journey in less than a month."

In 2009, the TVR open-source software was refined and embedded in the project "Swift River" at Ushahidi—a platform for crowdsourcing crisis reporting[6]. Swift River focuses on optimizing information flow in the first three hours of a crisis situation, allowing information to move faster and further. Swift River was first applied to track the Indian election. Vote Report India (VRI) partnered with citizens' networks, human rights organizations, and journalists to solicit direct text messages, email, and Web reports on violations of the Election Commission's Model Code of Conduct. The goal was to aggregate the direct reports with news reports, blog posts, photos, videos and tweets related to the elections from all relevant sources on an interactive map. The map was designed to allow tracking of irregularities in the campaigns leading up to the elections, the voting experience on the day of the elections, and the election results themselves. In addition to the Indian elections, the software was also applied to track citizen and official reports of the Swine Flu epidemic.

In mid-2009, the contested election in Iran also prompted TVR volunteers to revisit the tools they had developed in order to track and map violence and suppression of demonstrators on the ground. As this report was being drafted, volunteers were working to figure out how to adapt the sweeper interface to filter and categorize existing Twitter tags in English and Farsi, while still maintaining anonymity for contributors who could be targeted for crackdowns within the country.

Twitter Vote Report not only set the stage for future social media-based vote monitoring efforts; it demonstrated the power of distributed, ad-hoc development, planning and collaboration. This capacity was in turn used to plan and execute a related project: Inauguration Report '09.
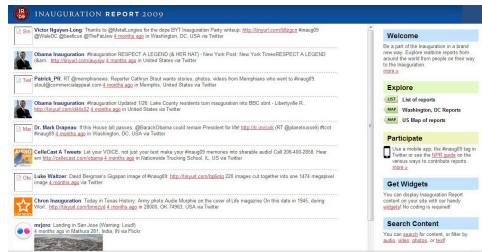
IR09

The goal for the IR09 project was to enable users to be a part of the 2009 presidential inauguration of Barack Obama in a brand new way, by contributing and exploring real-time reports. Core TVR volunteers—Andy Carvin of NPR, Dave Troy of Twittervision, Andrew Turner of GeoCommons, and Sze Wong of Zerion Consulting —saw a new and promising opportunity to develop a crowdsourced account of the day via a dynamic multimedia gallery.

While TVR focused on election monitoring—a critical real-time function that could have caught serious voting irregularities—IR09 had a more celebratory goal. The project aimed to capture everyday people's impressions of the atmosphere of this historic event, such as Peggy Schaeffer from North Carolina, who tweeted shortly before the ceremony: "On the Mall now-- about half way btwn Washington Monument & Lincoln Memorial. Sun coming up on a whole new era." Among other topics, IR09 reports reflected the excitement of users on their way to the National Mall, their astonishment as the crowd started booing President George W. Bush, a discussion about Michelle Obama's dress and rumors about Senator Ted Kennedy's collapse at the inaugural lunch. In addition to sharing emotions and personal experiences on Inauguration Day, IR09 enabled users to retrieve information such as where the closest warming stands were or where problems occurred. Twitter user David Russell, for example, reported problems accessing the parade route: "I don't think I'll be able to get in to see the parade. They just stopped admitting people at the 14th Street gate." Such contributions offered a refreshing complement to more traditional coverage of the inauguration, which focused mainly on high-profile speakers and media personalities.

Given that the inauguration was a highly visual event, project organizers Andy Carvin, Dave Troy, Andrew Turner and Sze Wong developed new features that offered users multiple ways to contribute to the project, capitalizing on popular, commercial social media tools to encourage participation. IR09 developers made it possible to submit contributions on Twitter, Flickr, YouTube and via text messages. Moreover, iPhone and Google Android phone applications allowed users to easily record audio and video footage. The developers also added a new feature to the iPhone application which allowed users to save their reports whenever the phone could not connect to the server. This feature was later also ported to Android.

Everyone was invited to share their inaugural experience by using the #inaug09 tag for posts to the social media services. Once submitted, user dispatches were tracked and the tweets were plotted on a map based on the users' profiles or GPS location. To spot the exact geographical location of contributors, users were asked to add predefined location tags to track their location along the National Mall, the parade route and elsewhere around the globe (see list of tags in appendix). A national and a hyperlocal map of Washington, DC both displayed related contributions.

Similar to the TVR website, the Inauguration Report 2009 website[7] served as a tool to aggregate and display the information from the various communication platforms. In addition to capturing the submissions on a single platform, the tags facilitated the filtering of contributions into multiple sub-categories to allow journalists and academics to report on the content later on.

Funding Model

The TVR project was an all-volunteer endeavor, but a considerable number of in-kind donations were contributed to support the effort. Several individuals had their professional time covered by their home organizations to work on the effort, including Andy Carvin of NPR, Nancy Scola of Personal Democracy Forum and Billy Gray of Zetetic. Dave Troy of Twittervision and Andrew Turner of GeoCommons contributed significant time to developing the technical infrastructure. In addition to donated staff time, the costs to realize the project included the purchase of servers by Network Redux, donation of a Business Wiki by PBwiki (starts at $8/user/month), and the registration of 13 domain names (at a cost of $144.67) by the Independence Year Foundation for one year. The Independence Year Foundation also sponsored Matt Cooperrider's time to work between 10 and 30 hours per week on coordination and documentation.

Similarly, IR09 was an all-volunteer project and could not have functioned without the commitment of core volunteers and partners. The costly part of it was the Web hosting for the Inauguration 2009 website; as a partner to the project, NPR subsidized this cost.

Such a funding model was possible because of the short-term nature of these projects and the high stakes and high profile nature of the 2008 election. It is unclear that such high-level involvement of volunteers and technology professionals could be sustained; in fact, participation dropped off significantly once the election was over.

Project Partners

While the technology volunteers were moving very quickly to develop tools for TVR, it became clear to Allison Fine and Nancy Scola that in order to be successful they needed institutional partners that could help spread the word. It was very late in the election game, but such organizations were already prepared to mobilize voters by email and cell phone, and were interested because they had not yet developed Twitter-related tools. Very quickly the entire Voter Protection Coalition signed up as a partner as did many of its individual members. In addition, media partners such as NPR and PBS were added, as well as technology partners. The full list of partners included:

- 866-OUR-VOTE (The Voter Protection Coalition)
- Campus Progress Vote
- Common Cause
- Center for Community Change
- Center for Media and Democracy's ElectionProtectionWiki.org
- Credo Mobile
- Current TV
- Demos
- FortiusOne GeoCommons
- Independence Year Foundation
- League of Young Voters
- Mobilize.org
- Mozes.com
- Network Redux
- NPR's Social Media Desk
- Not An Alternative
- Ohio Telecom
- PBwiki

- Plodt.com
- Rock the Vote
- Roundhouse Technologies (twittervision) Volunteer Kit
- Student PIRGs
- techPresident/Personal Democracy Forum
- twittervision.com
- Video The Vote (PBS and YouTube)
- Voter Suppression Wiki
- Why Tuesday?
- Women Donors Network
- Zerion Consulting
- Zetetic

As noted above, individual volunteers also played major roles within TVR. Fine and Scola took on the role of main organizers for the project. Other core volunteers who were crucial to developing, implementing and executing the project were:

- Mike Bukhin (data visualization)
- Andy Carvin (NPR connection, crowdsourcing/citizen journalism)
- Matt Cooperrider (volunteer coordinator)
- Sanford Dickert (code, design)
- Beka Economopoulos (recruitment, publicity, outreach)
- Cory Forsyth (code, API, data visualization)
- Nathan Freitas (Android application, widget development)
- Billy Gray (Ruby/SQL development)
- Ha-Hoa Hamano (general databaseb/web maintenance, Asian American language access)
- Amanda Hesser (Plodt.com visualization, CafePress T-shirts)
- Noel Hidalgo (recruitment, publicity)
- Devanshu Mehta (CafePress T-shirts, Reddit, general code)
- Jon Pincus (security, media work, social network activism)
- Micah Sifry (media outreach, troubleshooting)
- Dave Troy (chief visualization, technological infrastructure)
- Andrew Turner (chief visualization, technological infrastructure)
- Tracy Viselli (social media, blogger relations, online organizing)
- Sze Wong (iPhone application development)
- Deanna Zandt (Web site and Wiki design)

It's worth noting that TVR happened just as Twitter's popularity was ascending and the failure of the voter mobilization groups to take advantage of it became apparent. It is unclear whether an effort to use one communication channel for Election Day communications could cut across institutional lines as easily as this one did or whether organizations would need to "own" it as they do their mailing lists in the future.

IR09
As a spin-off of TVR, the IR09 project was initiated and organized via the network of committed volunteers who had successfully cooperated on TVR. All core volunteers used all online platforms available to them—including their own blogs, Facebook and Twitter profiles—to promote the project. This allowed the project to enter public discussion and ultimately become viral. Dave Troy

of Twittervision and Andrew Turner of HighEarthOrbit.com were both instrumental in developing the technical infrastructure for the project and refining the software used for TVR. Sze Wong took on the development of the iPhone application.

In addition, the project teamed up with American University's School of Communication. Journalism Professor David Johnson and his Digital Skills for Reporters class joined the project and captured individual stories, photos and videos for aggregation on IR09's website. Armed with Flip video cameras, the AU journalism students also produced videos from various locations in the Metro-DC area, which were uploaded to the CBS blog. In addition, several of Professor Jane Hall's Advanced Reporting students also participated in the project.

Having AU journalism students and media partners agreeing in advance to participate strongly influenced project organizers' ability to get the word out, communicate the tags to be used and introduce the project to the public and media. Among the participating journalists ("friendlys") were NPR reporters and *Washington Post* journalists.

A number of national news outlets signed to IR09 on as media partners. NPR in particular was an early contributing partner to both TVR and IR09. NPR's Social Media Desk actively participated via Carvin as a media partner to get the word out and promote the tags. NPR's engagement in the project included announcements on *Morning Edition* and on other shows focusing on the inaugural events. Moreover, NPR provided a guide on its Web site on how to participate and use the various Web 2.0 services.[8] Current TV also promoted the tags as a media partner. CBS News joined the coalition as an additional partner later on in the process. CBS came to AU seeking to engage and collaborate with students on an inauguration project. Instead of getting students involved in supporting the CBS News program on the inauguration, Johnson proposed that CBS get on board with IR09. As a result, CBS News promoted the #inaug09 tag on its Web site and asked American University students to do mobile video blogging.

Publics for this Project

At the Center for Social Media, we define "publics" as groups of people who use media to actively learn and communicate about a shared issue in a democracy (see our *Public Media FAQ*[9]), and term projects that provide contexts and content around which such publics can form "public media 2.0" (see our recent white paper[10]). In the case of TVR and IR09, the first shared issue that publics formed around was the process surrounding a highly contested election, and the second the historic swearing-in of President Barack Obama.

In theory, the entire voting public could participate in either project, and in practice there were even some international contributors. However, given the speed with which the projects came together and the relatively small number of people using Twitter and related SMS services, there are certain groups that were more likely to participate:

Early adopters:
Twitter is notable for its viral social networking capacity—each Twitter user both "follows" other users and has "followers." This means that well-positioned advocates could easily engage discrete clusters of connected users in the use and promotion of TVR by. Excitement about the potential uses of Twitter had built over the course of 2008, making it an attractive platform for raising awareness and interest in distributed vote monitoring. Add-ons such as TVR iPhone and Android

applications, and online visualizations were also pitched to tech-savvy audiences interested in new tools and interfaces.

Election protection advocates:
The TVR system was designed to serve as an "early warning" system for problems at the polls. While no notable crises emerged, a number of delays and small violations were reported during the course of the project, which were made available to election protection advocates for future reference and advocacy work.

Reporters
Since the project was operating in real time, TVR provided fodder for journalists covering early voting and Election Day. While only present at limited voting locations, reporters could use TVR as a resource to gain access to geographical settings they had previously not had access to due to limited staff or budgets. The combination of rolling live tweets and an interactive Google map provided a live national overview that rivaled efforts by networks and bloggers to provide simultaneous coverage of results and voting conditions.

IR09
Similar to Twitter Vote Report, the IR09 was targeted to a wide user base. Theoretically, everyone who was attending an inaugural event in or outside of Washington, DC was invited to participate, and those outside could contribute observations about the event. However, given the rather new social media tools leveraged by the project, the main public for this project was again early adopters—especially those using mobile devices—and reporters both attending and covering the event.

IR09 was pitched to tech-savvy individuals who were already familiar with social media platforms; organizers aimed to integrate and use platforms already in use by prospective participants, thereby allowing them to continue communicating on their favorite social network sites. In addition, the project targeted both traditional and online reporters to participate in the project and motivate them to use the #inaug09 tag for their own coverage. Although the project received submissions from other countries, IR09 was not designed to target a global audience, because the organizing team was not able to provide country-by-country maps for a later evaluation.

It's worth noting how these different publics used IR09 tools. The majority of users enthusiastically shared personal stories and emotions that were triggered throughout the historic event. In contrast, reporters maintained a journalistic approach to their tweets, describing the overall atmosphere from an objective perspective. NPR Politics, for example tweeted during the inauguration: "Crowd cheering and waving flags as video of Obama's kids pops up on the jumbotron."

Obstacles

A primary obstacle faced TVR organizers was time; they had less than a month to pull the project together and promote it, and faced a number of technical hurdles and threats, including:

- high traffic loads
- Designing multiple interfaces and organization tools (Web site, Wiki, Google group, maps, sweeper interface, Plodt visualization, iPhone widget, etc.)

- Possible denial of service attacks
- Very low adoption rate of Twitter in ethnic and low-income communities most at risk for voter suppression

Additional obstacles included the difficulties involved in coordinating many volunteers across multiple platforms, the challenges of communicating the somewhat arcane Twitter tag structure to end-users, the possibility of false information or alarms, and the complications of sustaining interest from partners and reporters in a very busy period.

For the most part, the technical difficulties were surmounted, and volunteers collaborated surprisingly well, despite a bit of cross-channel noise and some unclear commitments. The organizers note that the shared endpoint—Election Day—with its crucial outcome, focused everyone's attention and gave the project a clear horizon. Keeping the priority of serving at-risk communities squarely in mind led to support for SMS (courtesy of Mozes) and for mobile phones (courtesy of Telecom) as complements for Twitter-based input.

Efforts to promote the project also presented a challenge. In the end a number of the partners did not follow through on promoting the project. TVR received more than 40 blog and media mentions in the days leading up to the election. It is possible, though, that there was an "echo chamber" effect, in that the media and bloggers who were interested in this topic were largely part of an existing network of early adopters and the coverage never reached beyond that inner group.

IR09
The main obstacles the IR09 project were related to management issues within the volunteer team, the application of new social media tools and on the fact that every contributor was facing the challenges of a field reporter.

As a volunteer-based initiative, a primary obstacle for the project organizers was managing time and volunteer support. The idea for the project emerged shortly after the successful TVR project, which only left about two months for refining the technological framework and project, bringing new partners on board, and getting the word out. Moreover, organizers also struggled to set up a clear division of tasks. Because of the project's volunteer-based structure, there was no hierarchy imposed on the volunteers, which made it tough to coordinate the next tasks to be executed at each point.

The setting of IR09 as a field production—that is, with many contributors using different devices to report on a bustling, multi-hour event—also presented some obstacles. Functioning in real-time, users were dependent on their technical devices, including cell phones, smart phones or laptops. The U.S. Secret Service however was, due to security reasons, dampening cell-phone receptions in the areas where the president was, thereby making it impossible for some to participate at various moments. Consequently, it was hard to identify and communicate locations where people could access a reliable connection to upload their contributions. What's more, the crowded public transportation within the Metro-DC area caused delays and impacted the mobility of participants.

Lastly, the use of social media tools was an obstacle itself. The IR09 project was restricted to a specific subset of the overall population. Tech-savvy people who are familiar with the social media were more likely to participate, while the larger public that is not yet familiar with the tools was not integrated into the project. Plus, crowd-sourced reporting always relies on individual perceptions. As

it was designed, the IR09 project did not provide filters or rating tools that would allow readers to make a judgment on whether the contributions were reliable or credible.

Impact

Since the 2008 election did not trigger major scandals around faulty electronic voting machines, efforts to block low-income voters, or other projected calamities; the capacity of the TVR project wasn't tested to the fullest. As a result, the success of the project lies mainly in its status as a proof-of-concept, organized in a very short timeframe, and attracting a significant number of contributions. In addition:

- With more than 12,000 submissions from across the country over the course of the election week, TVR attracted national attention and engaged a broad range of users.
- TVR prompted notable enthusiasm and substantial volunteer labor among a core of busy professionals affiliated with national media, technology and political organizations.
- The project was barn-raised across a raft of social networking and mobile platforms and technologies, serving as a model for future projects more likely to provoke robust participation as these technologies are adopted by a wider range of users.
- Reports of voter suppression (false ballots passed out on long lines at voting precincts in Virginia and a poll tax levied in Indiana) reached the Election Protection Coalition through TVR.
- The open-source code developed for the project was contributed to GitHub so that future project designers can utilize it.
- Relationships among the various voter protection projects were reinforced through collaboration with TVR organizers.
- The reports submitted on Election Day were primarily celebratory messages from voters to a community of other voters. This was a surprising outcome and a very satisfying outlet for voters looking to announce and share their good Election Day experiences with others.
- The sweeper interface was an unexpected success—not only did the system help volunteers to clean up the data for display, but sweepers actually reported enjoying the task and being moved by the submissions they were vetting.

Awards:
The Twitter Vote Report received the 2009 Golden Dot Award for Best Animation or Mash-Up awarded by the Institute for Politics, Democracy & the Internet (IPDI) at The George Washington University

Media Coverage:
Although organized and executed in a very limited time scope, TVR garnered notable media coverage beyond the network of the volunteers. As previously stated, the coverage was mainly generated previously to Election Day. In addition to promotion of the project on NPR[11]) organized by Carvin, TVR also received coverage from major news outlets and high-profile blogs, including *Time*[12], the Huffington Post[13], the *New York Times*[14], TechCrunch[15] and the blog of Craig Newmark the founder of Craigslist.[16] (NOTE: Jessica Clark, the second author on this report, both covered the project for national political magazine *The American Prospect* and participated on Election Day as a sweeper.)

The impact of the global offshoots of TVR have been less clear-cut. While the Vote Report India project was successful in terms of mobilizing an active and engaged volunteer-based community to bring the project to life, with less than two hundred reports the project did not manage to motivate the Indian public to participate. "We set out to crowdsource election monitoring, and I have to admit that we have failed so far," wrote one of the VRI core volunteers Gaurav Mishra on his blog midway through the election process.[17] Once the election was over, Mishra catalogued the project's successes and failures,[18] noting that this was only "Version 1.0." Successes included a quick startup, creating buzz, building relationships among civil society organizations, and a vibrant community of volunteers. But low voter turnout and low levels of participation raised questions about whether building an online-only tool for election monitoring was appropriate for the country's media ecology.

Mishra noted that his project team was already preparing tools and approaches for the 2014 election based on what they had learned. Similarly, TVR organizers are still actively working to repurpose their toolset to address the messy aftermath of Iran's elections, which suggests the project's role as one step in an ongoing evolution of crowdsourced election reporting. The major obstacles facing the organizers in Iran are the lack of verifiable sources and organization prior to the events, and the censorship by the Iranian government. While Twitter has been widely used by protesters and activists in Iran to speak up and illustrate the events in Iran, for outsiders it is nearly impossible to trace the information back and verify it. Moreover, the Iranian government has begun to monitor the online activism on Twitter thereby putting individual Twitterers at risk. Overall, however, Twitter has proven to be a powerful communication channel for people in Iran who are otherwise prevented from raising their voices.

IR09
Inauguration Report '09 was a popular online project, triggering more than 35,000 contributions aggregated on the project's site over the course of the 2009 inauguration weekend. Twitter was demonstrated to be a reliable tool to collect crowdsourced information in real-time. On Twitter, 30,515 posts were retrieved. Contributors also submitted and tagged 4,683 photos on Flickr and 115 videos on YouTube with #inaug09; 808 contributions were submitted via the iPhone application, 122 via Android, 59 via text message, and 12 via e-mail. At various points on inauguration day there were 300 posts per minute going through the system.

Beyond the quantification of the project, the main impact of IR09 lies in the pioneering application of crowdsourced reporting of a large-scale event as it takes place. In addition:

- The project was a collaborative effort bringing together the broad public, major news media such as the *Washington Post* and online start-ups to cover a historic event in an innovative way. "It's a democratic means of covering a celebration of the democratic process," says American University's David Johnson.
- People all over the globe, no matter where they were, could take part in the event by participating. This is a major advantage of this interactive social media approach.
- The "#inaug09" became the semi-official tag for the event and was used more than any other tag.

Next Steps

Project organizers have been brainstorming new applications for the technology and partnerships developed over the course of the two projects. Also, they are seeking related projects in order to

share best practices and reduce duplication of efforts. Not only are applications in a global environment such as Vote Report India possible, but also applications in the context of crisis response here in the U.S. Overall, the tools need to be advanced and refined in order to allow a wider public to utilize them.

Prospects for such projects will improve as adoption of Twitter and mobile devices continues to increase. So far, this seems likely: A June 2009 analysis of Twitter's growth by social media analytics firm Sysomos[19] noted that more than 70 percent of the 11.5 million users they analyzed joined during the first five months of 2009.

Lessons Learned

1. National political and media organizations now recognize the value of social media tools, and are willing to contribute both financial support and staff time to related projects. This may change, however, as social media practices become more common within such institutions.

2. Volunteer collaboration and resource acquisition is much quicker and less cumbersome in the Web 2.0 environment, but tensions between organizations and individuals still need to be actively managed. Transparent online planning processes and participatory planning tools help to mitigate disagreements and keep volunteers up to speed on quickly evolving projects.

3. A finite, high-stakes event such as a national election can focus volunteer energies, drive participation, and help to drum up media coverage. Participation can drop off rapidly after the event, however; as a result, volunteers and organizational partners need to be recruited while the iron is hot for archiving, assessing and repurposing such projects.

4. With crowdsourced media projects, it is important to capture participants where they are already actively sharing information. Twitter has proven to be a viable platform for distributed reporting, viral campaigns and mobile engagement. Supplementary platforms such as YouTube and Flickr extend and deepen multiplatform coverage.

5. Especially for all-volunteer endeavors, building on previous successes and technical infrastructure allows organizers and volunteers to advance related projects more quickly and efficiently.

Appendix

Recommended tags for Twitter Vote Report:

- **#votereport**
- **#[zip code]** to indicate the location of the polling place; ex., "#12345_
- **L:[address or city]** to drill down the exact location; ex. "L:1600 Pennsylvania Avenue DC"
- **#machine** for machine problems; ex., "#machine broken, using prov. ballot"
- **#reg** for registration troubles; ex., "#reg I wasn't on the rolls"
- **#wait:[minutes]** for long lines; ex., "#wait:120 and I'm coming back later"
- **#early** when voting before November 4th
- **#good** or **#bad** to give a quick sense of overall voting experience
- **#EP[name of state]** if a serious problem occurs and help from the Election Protection coalition is needed; ex., #EPOH

Recommended location tags for Inauguration Report '09:

Along The National Mall
- L:lincoln
- L:reflecting
- L:wwIImemorial
- L:washingtonmonument
- L:ellipse
- L:castle
- L:natgallery
- L:capitol

Along The Parade Route
- L:canembassy
- L:archives
- L:FBIbuilding
- L:nattheatre
- L:treasury
- L:lafayette

Anywhere Else
- Use your ZIP code (L:33175) or city (L:Evanston, IL).

---

[1] "Twitter: An Antidote to Election Day Voting Problems?" techPresident, http://personaldemocracy.com/node/5810

[2] Hurricane Information Center, http://gustav08.ning.com

[3] Twitter Vote Report, http://blog.twittervotereport.com

[4] Twitter Vote Report Wiki, http://votereport.pbworks.com

[5] Twitter Vote Report Google Group, http://groups.google.com/group/twittervotereport

[6] Ushahidi, http://www.ushahidi.com

[7] Inauguration Report 2009, http://www.inaugurationreport.com

[8] "Inauguration Report: Dispatches from Listeners," NPR.org, http://www.npr.org/templates/story/story.php?storyId=99395388

[9] *Public Media FAQ,* Center for Social Media, http://www.centerforsocialmedia.org/resources/publications/public_media_faq

[10] *Public Media 2.0: Dynamic, Engaged Publics*, Center for Social Media, http://www.centerforsocialmedia.org/resources/publications/public_media_2_0_dynamic_engaged_publics/

[11] "Vote Report: Help NPR Identify Voting Problems," NPR.org, http://www.npr.org/templates/story/story.php?storyId=96349881

[12] "Tweet the Vote!" *Time* magazine's Swampland blog, http://swampland.blogs.time.com/2008/10/31/tweet-the-vote/

[13] "Online Assistance Arrives to Combat Voting Hurdles, Glitches and Dirty Tricks," The Huffington Post, http://www.huffingtonpost.com/sarah-granger/online-assistance-arrives_b_139360.html

[14] "Tweet Your Voting Moment," The *New York Times'* The Caucus blog, http://thecaucus.blogs.nytimes.com/2008/10/27/tweet-your-voting-moment/

[15] "Tweet the Vote. No, Digg the Vote. No, YouTube the Vote. Oh,…Just Vote." TechCrunch, http://www.techcrunch.com/2008/10/30/tweet-the-vote-no-digg-the-vote-no-youtube-the-vote-oh-just-vote/

[16] "Protecting your vote using Net technologies," Craig Newmark's blog, http://www.cnewmark.com/2008/10/protecting-your.html

[17] "The Limitations of Technology in Tracking Election Irregularities, Guaravonomics Blog, http://www.gauravonomics.com/blog/the-limitations-of-technology-in-tracking-election-irregularities/

[18] "The Report Card on Vote Report India Version 1.0," Vote Report India, http://votereport.in/blog/the-report-card-on-vote-report-india-version-10/

[19] "An In-Depth Look Inside the Twitter World," Sysomos.com, http://www.sysomos.com/insidetwitter/