#CONNECTEDGOV

Engaging Stakeholders in the Digital Age

PARTNERSHIP FOR PUBLIC SERVICE

Booz | Allen | Hamilton

EXECUTIVE SUMMARY

The administration's three-pronged Digital Government Strategy[1] details how the federal government needs to keep up with ever-evolving technology and devices used by people living in an increasingly mobile world. The strategy seeks to:

➤ Empower Americans to access government information and services from anywhere at any time on any device

➤ Ensure that the government buys and manages devices, applications and data well

➤ Make government data available to spur innovation and improve the quality of services

The Partnership for Public Service, in collaboration with Booz Allen Hamilton, set out to learn how agencies are using technology and social media to engage stakeholders, address key challenges and further their missions. We present case studies on how social media is being employed at several federal agencies and a practical guide program managers can reference as they take advantage of communications platforms and tools to support their mission.

In our examination of seven agency programs, we evaluated how program managers used social media to reach their goals by looking at the challenges they faced, the actions they took to overcome them, the results they achieved and the lessons learned.

The projects or programs we examined were:

➤ The State Department's app for teaching English

➤ The Department of Energy's internal wiki for facilitating employee collaboration

➤ The Federal Emergency Management Agency's use of social media to provide disaster information in real time

➤ The Air Force Medical Service's social media project for improving health service delivery

➤ The Centers for Disease Control and Prevention's reporting system for monitoring influenza nationwide

➤ The National Archives and Records Administration's use of an existing wiki site to recruit volunteers with valuable expertise

➤ The National Aeronautics and Space Administration's crowdsourcing strategy for engaging knowledgeable people to help solve technical challenges

Our aim is to help agencies improve mission performance through more informed and effective use of social media and technology. The case studies and other information in this report are intended to inspire federal program managers to employ social media in new and innovative ways in order to strengthen relationships with their constituencies, and further their missions, through interactive communication.

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1   "Digital Government: Building a 21st Century Platform to Better Serve the American People," whitehouse.gov, http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government.html (accessed 27 Nov. 2012).

Use of digital platforms is by no means standard across government. In fact, some federal employees are still prohibited from even accessing social media sites.

When a photo showing President and Michelle Obama celebrating election victory appeared on Facebook in November, it received 4 million "likes." A "four more years" Twitter comment was retweeted—that is, resent after being received—by more than 790,000 users of that social media site. When Mayor Michael Bloomberg announced that the New York City marathon would go on despite the devastation in the wake of Hurricane Sandy, the social media backlash made him realize how unpopular his decision was, and he reversed it within days. And when Bank of America announced it was going to charge $5 a month for customers to use their debit cards, the massive outcry on digital platforms, including a petition on the social media site change.org, compelled the bank to change its plans.

The power of social media, mobile apps, interactive websites and texting is without doubt. The question for the federal government is: How can these technologies be used more effectively to improve, perhaps dramatically, how agencies carry out their work, fulfill their missions and engage with stakeholders in a collaborative environment?

In government today, there are pockets of excellence and innovation where agency programs have incorporated social media and digital applications into their everyday operations and are reaping the benefits. However, use of digital platforms is by no means standard across government. In fact, some federal employees are still prohibited from even accessing social media sites. Program managers who lag cannot expect that doing things the way they have always done them will continue to be effective in the new environment. They need to catch up with the nearly decade-old social media revolution, not only to benefit now, but also to be prepared for innovations to come. While government adoption and use of digital technologies remains uneven across federal agencies, the compelling value of social media to federal agencies has become clear:

➤ This phenomenon is here to stay. Its immediacy, ease of use and relatively low barrier to entry mean it will continue to displace other forms of communication and will become even more embedded in everyday life.

➤ Social media is more than just another route for one-time, one-way dissemination of static information. Government agencies can receive information back from populations, iteratively communicate with them about next actions, and reach and organize groups that then communicate with each other.

➤ Social media can connect large populations and remote groups, and content can be customized and updated almost instantly, at relatively low cost

➤ And, most significantly, an entire generation of voters and taxpayers now expects to communicate and conduct transactions through social media. Many citizens do not even remember life without such interaction. This is the new normal.

This report, a collaboration between the Partnership for Public Service and Booz Allen Hamilton, looks at how some federal program managers have grabbed the reins—

or the mouse or the smartphone—of social media in innovative ways. We identify and highlight how they have moved beyond simply disseminating information on the Internet to creating interactive relationships with the constituencies they serve, via social media and mobile apps for tablets and smartphones. We targeted a range of agencies with a variety of social media initiatives, ultimately conducting interviews with 26 individuals from 12 agencies. After choosing seven programs or projects to profile, we delved deeply into these agencies' efforts, interviewing program-level employees, particularly those who were responsible for social media initiatives and actively engaged with them.

The compelling cases we write about demonstrate creative ways program managers have used social media to achieve program goals, and offer lessons and examples that can be readily adopted and used in other agency programs. The program managers in these cases have engaged communities of interest using Facebook, Twitter, wikis, smartphone apps and more. They have come a long way since 2001, when the federal government first identified just 24 e-government initiatives for providing solutions for training, tax filing, federal rulemaking and e-training that seemed revelatory.

Social media has revolutionized the way many people communicate, allowing conversations to start spontaneously, and occasionally go viral, weakening the reliance on traditional media outlets for reaching key stakeholders and customers. Virtually all of the social media experts we interviewed said that social media efforts in government need to connect directly to program missions and goals, and that managers should examine how different digital platforms will support their mission outcomes. Once program managers have selected the suitable social media platforms or apps, they should develop performance measures to gauge whether they have chosen the appropriate ones, interviewees said. Program managers, who may prefer to avoid social media for fear of the criticism that can come with a more free-form style of communication, will have to rethink their approach as society continues to move forward in this arena.

Government's early forays into social media
The term social media first appeared on Google's radar in early 2004, although early adopters were engaging in this form of interaction prior to that. Since then, its meteoric rise, and its pervasive presence throughout most of the world, has redefined how people, organizations and governments interact. It has become common for social media users to get news and information quickly from friends and followers online, and the news links they post, when they visit the many available social media sites— that is, platforms that provide interactivity and user-generated content—such as Reddit, LinkedIn, Instagram,

Twitter and Tumblr. With the advent of smartphones and tablets, mobile apps have taken on an increasingly large role in our digitally redefined world.

One of the early federal forays into dynamic information-sharing on the Internet came in 2005, when President Bush began using RSS—commonly known as Really Simple Syndication—to give the public easy access to his speeches, press briefings and radio conversations. His administration joined the many newspapers, radio stations and other organizations that were providing continually updated content to their audiences through feeds provided by free subscription services. That same year, the Small Business Administration became the first federal agency to have a YouTube channel, using videos to share information about its programs. Today, all 15 Cabinet-level agencies have Facebook pages and Twitter accounts, and more than 1,300 government-related mobile phone apps are available to the public, according to the GSA. These range from information about Food and Drug Administration recalls and Department of Transportation data on airline on-time performance to State Department foreign travel alerts to comparisons of nursing homes based on surveys of Medicare patients.

The social media transformation continues
As agencies incorporate social media into their activities, government leaders are realizing that it can be used to deliver vital services, connect constituents to one another and assemble information from a group. Importantly, these tools allow for citizen feedback that helps agencies improve services. This kind of collaboration removes barriers that have slowed or deterred communication between citizens and their government in the past, and potentially can save government resources and assist agencies in achieving their goals. "No matter how many rocket scientists you have, you're always missing an expertise that is abundant in another sector or another industry," said one social media expert we interviewed, who pointed out that social media's potential will be unlocked only if "an organization taps into the abilities of people beyond their organization's walls or payroll."

The platforms that agencies use to advance their mission objectives vary. They range from crowdsourcing, phone and mobile apps, competitions and social media such as Facebook and Wikipedia. But, as our report highlights, it is not enough to flip a switch and log on to social media. To be effective, program managers need to think strategically about how to use social media to support agency mission and achieve program outcomes. They need to get past the tactical hurdles that can stand in the way of meaningful implementation and be prepared to learn and adapt continuously so their initiatives can remain attractive to users as social media continues to evolve.

The agencies we interviewed integrated social media tactics into their broader strategy, ensuring that social media outreach is not the goal, but the means to achieve their goals. They started by deciding on the results they wanted to achieve and then determined which platform would deliver the most cost-effective results. The results were promising and relevant to program managers seeking innovative ways to achieve their mission. While other studies have addressed best practices in social media, this report specifically examines how managers at the program level used social media and apps to accomplish their goals. We set out to provide compelling examples that will motivate project and program managers, supervisors and budget decision-makers across government to think about how they could benefit from these tools.

We chose inspiring examples that varied by audience, social media platform and outcomes sought. All these initiatives engaged audiences in ways that were beneficial to agency programs. We examined the following agency programs and digital strategies:

➤ The State Department's English-language app provides people in developing countries easy access to English-language instruction via a basic cellphone.

➤ The Department of Energy's Powerpedia site facilitates employee collaboration and exchange of project ideas within an agency whose workforce is geographically distributed.

➤ The Federal Emergency Management Agency's social media effort in Alabama provided real-time disaster information, making it possible to correct misinformation, respond quickly to urgent questions and help citizens help themselves.

➤ The Air Force Medical Service improved critical health service delivery by setting up Facebook pages for its facilities.

➤ The Centers for Disease Control and Prevention's U.S. Outpatient Influenza-like Illness Surveillance Network, a reporting system that aggregates disease information from providers reporting from around the country, monitors seasonal flu epidemics and helps reduce the response lag time.

➤ The National Archives and Records Administration uses Wikipedia to tap into valuable expertise outside the agency and recruit volunteers to scan documents and identify errors.

➤ The National Aeronautics and Space Administration's International Space Apps Challenge employs digital means to crowdsource people with scientific knowledge to help solve advanced technical challenges.

When reading about these cases, it is critical to remember that, for program managers to get started with a social media solution, they need to contact their agency's social media director to see what technology is available; contact their public affairs officer, chief information officer or anyone else who should be involved in the effort; and see how the cases described below can be adapted for use in serving their agency's mission.

CASE STUDIES

In conducting interviews with 26 individuals from 12 agencies and offices, we found programs that used Facebook, Skype, mobile applications, wikis, crowdsourcing or other collaborative or social tools to achieve goals and missions. The lessons program managers learned proved valuable for them and their programs and can be used in other agencies' programs and projects.

Reaching a distant audience

In Tunisia, the Department of State is making English-language instruction easily accessible through a mobile phone app.

CHALLENGE

The most common request the State Department receives from foreign diplomats is for assistance with helping their citizens learn English. In 2011, following the Arab Spring in Tunisia, the department saw an opportunity to show support for the Tunisian people and strengthen the U.S. relationship by making English-language instruction more widely available. The department runs classroom programs worldwide, such as the English Access Microscholarship Program, which provides two years of after-school language instruction to 13- to 20-year-olds and currently has about 30,000 students enrolled. But these programs have limited reach in Tunisia due to resource constraints and a population that is geographically dispersed. Although Internet access often is limited and unreliable in many areas of Tunisia, there is a well-established and active cellphone network with 93 mobile phone subscribers for every 100 people. The department wondered if it could tap into that existing platform and use it as a low-cost tool for delivering language instruction.

ACTIONS TAKEN

The State Department launched a 90-day pilot in Tunisia using an English-language instruction application for devices called feature phones—which do not quite have all the features of a smartphone—that was geared toward people with some basic English-language skills. The department provided unique content for the lessons and partnered with Tunisiana, the country's largest cellphone carrier, to provide the infrastructure and support for the program.

Tunisiana advertised the program through text message blasts, and during the pilot phase, the app was available free to the 6 million users of the company's telephone services. The program also was marketed through both traditional and social media, including an event that featured the U.S. ambassador to Tunisia. The State Department advertised it through existing English programs in schools and community centers.

A department office in Washington conducted focus groups via Skype and analyzed data to evaluate the program as it progressed. The information and data were used to suggest to Tunisiana how to improve the program, such as by adding a dictionary function and bookmarking capacity that would make it easier for students pick up where they left off in their lesson.

When the pilot period ended, the program was turned over to the cellphone company, which has continued to provide the English-language instruction to paying subscribers.

OUTCOMES

By the time the pilot program ended, it had 535,000 users—a significant figure in a country with a total population of about 10 million, and a statistic that convinced State Department leadership of the validity of the concept of English-language instruction via mobile phone. The program's success led to requests for more information from other U.S. embassies around the world on how to launch similar programs. The Skype focus groups contributed critical observations that the department is taking into consideration as it designs and develops future mobile English projects. The pilot demonstrated to the department that digital tools can be tried, tested, revised and expanded rapidly. Although the program is no longer free—it costs about 25 to 35 American cents a day—and use has dropped substantially, many people are still learning by cellphone, in addition to classroom lessons.

Insights for program managers

➤ Brief pilots can demonstrate value and build demand.

➤ Early feedback can pinpoint where improvements are needed and lead to further growth.

➤ Technology can be used to access hard-to-reach populations.

➤ Social media initiatives can be conceived, designed, implemented and refined in short periods.

Is this type of solution right for your federal program?

☐ Does your agency have geographically dispersed and difficult-to-reach stakeholders it needs to connect with at lower cost?

☐ Does your agency need to communicate with these stakeholders on a regular basis?

☐ Do your stakeholders have difficulty getting desktop access to the Internet?

☐ Are you able to take advantage of infrastructure or networks already in place?

☐ Can your content be adapted for mobile delivery?

Collaborating internally

The Department of Energy uses a wiki called Powerpedia to enable employees in separate offices to work together.

CHALLENGE

The Department of Energy (DOE) has more than 15,000 geographically dispersed employees, who use decentralized information systems in 17 national laboratories and 14 technical facilities around the country. Although the agency is home to top energy scientists and Nobel Prize winners, its size and structure make it difficult for employees to share information, collaborate or take advantage of in-house expertise. The absence of a strong central intranet system further complicates employees' communication and coordination. The goal of the project dubbed Powerpedia was to allow employees working on similar or related topics to collaborate on project goals, share new information and give feedback on early releases, so they could eliminate duplication and share expertise more readily.

ACTIONS TAKEN

Upon learning about an internal wiki called Intellipedia, which facilitates communication throughout the Intelligence Community (IC), a senior leader recruited one of its champions to build a similar product for DOE and lead the initiative to implement and use it. The technological infrastructure was developed and senior technical employees—the wiki's champions—established a Powerpedia working group of nearly 30 early adopters who met weekly to share best practices. The group had a vested interest in the wiki's success and built relationships with agency offices to help expand its use.

The creators marketed Powerpedia internally. The marketing team placed links to the wiki in agency newsletters and other communications, and DOE's technology staff installed an icon on the employee computers it controlled—about a third of the agency's computers—to make the wiki more visible. Small groups of managers were shown how their offices could use the tool. Training sessions and briefings that emphasized its value and relevance helped identify and empower early adopters. As users incorporated Powerpedia into business processes, their successes became testimonials about the wiki's value and were advertised throughout the agency.

OUTCOMES

Since Powerpedia launched in January of 2009, many program managers and employees have incorporated it into how they do their work. There now are about 15,000 distinct pages and as many as 700 edits a day, indicating active user involvement, said an interviewee. In total, it has had over 100,000 edits and 1 million page views.[2]

The wiki has repeatedly proven its value for fostering employee collaboration. For example, an employee posted information about an initiative to measure and remove pollution in soil below the reach of typical cleanup methods. (Some nuclear sites have this deep contamination that could threaten groundwater.) Within 48 hours, a researcher contacted the headquarters office to find others working on the issue. He connected with employees at other DOE labs and cleanup sites, including one on the campus where he worked. Researchers learned that a model from one scientist's paper had been modified and used at another lab. Without previously being able to conduct a comprehensive search of DOE facilities and research, many researchers working on similar issues were not sharing valuable expertise. Most DOE facilities maintained separate intranets and project websites. Even if some projects were posted on public websites, they typically contained less detailed information than scientists needed.

Now employees and offices share research internally more efficiently, benefiting the whole department by increasing internal transparency. Employees have been using Powerpedia to post meeting notes and presentations. If agency researchers search now for the soil contaminated issue, they will find upcoming meetings posted and notes from previous ones. By using the wiki as a management tool, senior leaders empowered employees, giving them access to information about project decisions and schedules and increasing transparency and compliance. For example, one senior advisor posted his top goals and the plan for achieving them, allowing employees to go to the wiki to read about progress on the projects put in place for reaching those goals.

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2   "Walking the Walk: Making DOE Management and Operations More Efficient and Effective," Energy.gov, http://energy.gov/articles/walking-walk-making-doe-management-and-operations-more-efficient-and-effective (accessed 15 Nov. 2012).

Insights for program managers

➤ Social media can be used to cut across historically siloed organizations.

➤ The wiki tool fosters information-sharing, assists with correcting misinformation and mistakes, and helps employees identify valuable materials and information.

➤ Building a platform is not enough; only consistent, active use will drive results.

Is this type of solution right for your federal program?

☐ Do you need to find out if other groups within your agency are doing work similar to yours?

☐ Would it be useful to share information across agency projects and subcomponents using a site that isn't public?

☐ Are programs within your agency siloed and would they benefit from program teams learning what others are doing so they do not duplicate work?

Report urgent information in real time

The Federal Emergency Management Agency uses Facebook to coordinate disaster response and communicate with citizens.

CHALLENGE

In April 2011, the South, Midwest and parts of the Northeast were hit with one of the deadliest and most costly series of tornados in history. Alabama was hit particularly hard. Tornados affected 65 percent of the state and killed more than 200 people. In fact, the number of tornados that hit the state in that one month broke its record for the number of tornados touching down in a calendar year.[3] Even though Alabama's Emergency Management Agency was communicating with the public through Twitter, news releases and traditional emergency alert channels, agency staff learned quickly that the social media presence was insufficient for rapidly disseminating and collecting information and that a Facebook page was needed. Locals were creating their own Facebook pages but frequently were posting inaccurate and misleading information, leading to increased frustration among affected residents.

3   "April Severe Weather Events Set New Tornado Records for Alabama," National Weather Service Weather Forecast Office, National Oceanic and Atmospheric Administration, http://www.srh.noaa.gov/bmx/?n=climo_2011torstats (accessed 15 Nov. 2012).

ACTIONS TAKEN

Within hours of tornados descending on Alabama and causing major destruction, the Federal Emergency Management Agency (FEMA) stepped in to create and promote a Facebook page for coordinating emergency relief, at the request of the state emergency management agency. FEMA set up the initial structure and comments policy and then promoted the page to the public, directing questions about local issues to the state agency.

FEMA set up a fully operational Facebook page for gathering and distributing information before a field operations office could be set up. Later, the field office had at least four people monitoring Facebook and Twitter and responding to posts from survivors. Volunteer and local emergency management agencies and groups posted important information, such as where to find emergency food stations and donated medicines, and how to apply for federal relief. Federal and state personnel could learn of residents' concerns by reading comments posted on the page.

When a survivor commented about resources that were needed somewhere, social media monitors would coordinate with operations staff to find out if resources had been sent to that area. If not, the monitors would notify operations staff to deploy assistance and evaluate conditions on the ground. If resources already were available, the monitors would pass along details about the existing resources and where to find them. FEMA provided staff and expertise for four months to help maintain the Facebook page, an effective social media tool for responding to concerns and publicizing accurate, useful disaster response and recovery information. FEMA then transitioned out of its role and left maintenance of the page to the state government, which has kept it up as the Alabama Emergency Management page.

OUTCOMES

Facebook provided Alabama with an additional tool to meet citizens' needs, answer questions from the public, direct personnel effectively and broadcast information about recovery services offered by government and other organizations, all in real time. In its first week the site attracted 4,000 "fans," as followers are called. Immediately after the disaster struck, the page had information about shelters and how to apply for emergency and financial assistance. It offered details about services that organizations were providing, such as donated supplies for residents with diabetes from the American Diabetes Association and mobile food service canteens provided by the Salvation Army. The page also answered questions about how to navigate the complicated system of disaster services and loans provided by federal, state and local sources.

Alabama's Emergency Management Agency continues to post on its Facebook page daily, providing information on food storage ideas, preparedness and information on disaster relief. The state is better prepared to coordinate responses to future disasters now that it has built a Facebook audience of 12,000—people who clicked to "like" the page so they could receive the state's posts. Alabama's Facebook page also links to other disaster-assistance resources, such as local emergency management agencies, FEMA and the American Red Cross. When these organizations repost Alabama's content, it increases the reach of the state's information. The page also helps the public prepare for emergencies, which will help minimize the impact of future disasters. For example, as Hurricane Isaac approached in 2012, the state emergency management agency's page experienced an increase in traffic and offered preparation, safety and relief information long before the storm was expected to hit.

Insights for program managers

- Social media provides real-time information, making it possible to correct misinformation and respond quickly to urgent questions.
- Tremendous impact is possible without a large initial financial investment.
- Citizens trust social media and access it even in emergency situations.
- In times of disaster, social media may be the best or only way to connect.

Is this type of solution right for your federal program?

- ☐ Does your agency need to communicate with all constituents in real time or within an extremely rapid time frame?
- ☐ Is your main focus for social media to reach out to the public during critical periods?
- ☐ Do you need to assemble a collection of resources for diverse locations in one place?

Publicize available medical services

Air Force Medical Service improves health services delivery to military personnel and their families via Facebook pages.

CHALLENGE

Air Force Medical Service (AFMS), entrusted with meeting the health and medical needs of a vast patient population, comprises 75 medical treatment facilities around the world and serves more than a million Air Force service members and their families. Yet, until recently it had limited websites that weren't providing enough of the information patients needed. For people to get answers to their questions about preventative health and medical services and procedures, they had to visit one of the clinics in person. Locating a clinic online was difficult, however, because AFMS did not have an effective strategy for communicating with potential patients over the web. The decision to promote Facebook among individual centers was challenging initially because it had to be orchestrated in the heavily regulated military and health care environment.

ACTIONS TAKEN

A headquarters-based task force created a communications strategy in early 2011 to help facilities connect with current and future patients, and distributed social media guidelines and toolkits. Each medical center received assistance with creating a Facebook page with common content on health information and responses to frequently asked health questions.

To facilitate the communications strategy, the AFMS Surgeon General Facebook page was built out and became a primary dissemination point for content. The task force also established measures to help gauge effective implementation. For example, centers were rated as basic, advanced or "awesome," depending on how active their Facebook pages were, resulting in a healthy competition among the facilities.

The central task force did not mandate the use of Facebook, but to ensure success, it created a communications group that responded to questions, reached out to early adopters to help build momentum, worked with interested senior leaders and helped identify training available to the facilities.

Other aspects of the overall strategy included allowing patients to text or email health care professionals about their personal circumstances through a secure messaging system and receive a response within hours. The service prevents unnecessary doctors' visits, saving money for both patients and facilities. Twenty medical facilities now provide the service, and AFMS plans to expand it to all locations.

OUTCOMES

Two years after the inception of the Facebook initiative, 86 percent of AFMS's medical facilities use the site to communicate with Air Force personnel and their families, and they continue to add information. For example, one facility created a Facebook page for a diabetes support group. Air Force personnel can also find information on suicide prevention and asthma. With this increased availability of useful information posted online, more personnel are taking advantage of the services they are entitled to. For example, after one military treatment facility used Facebook to advertise the availability of the flu vaccine, a record number of people came in for the shot.

Incorporating social media into medical facilities' operations also led to a significant culture change, so AFMS needed to employ change-management strategies, such as outreach and training, to help many Air Force personnel overcome their concerns about its use. For example, one facility feared it would be inundated with negative comments. But leaders discovered the conversation about their facility was already happening without them: A disgruntled beneficiary had created a Facebook page for that center. By creating the legitimate Facebook page, the center was able to draw people to a site with useful information and assistance, respond to criticism and correct misinformation.

Insights for program managers

� Social media can connect local audiences to the bigger picture while also providing region-specific information.

➤ Social media initiatives can work even in highly regulated environments.

➤ The solution can be simple.

➤ A large segment of the public searches for information on social media sites such as Facebook and Twitter, so an agency's absence can hurt its credibility, and Internet conversations will happen whether an agency participates or not.

Is this type of solution right for your federal program?

☐ Is your agency's existing web presence limited?

☐ Is your current website difficult to update?

☐ Does your agency have many offices or facilities throughout the country that need a way to communicate with their constituents or audience?

☐ Could your agency lessen the number of phone calls or visits to its offices by providing information online?

☐ Do you need to reach constituents who are connecting somewhere else?

Requesting assistance from the public

The National Archives and Records Administration calls on a supportive community for valuable expertise and assistance.

CHALLENGE

The mission of the National Archives and Records Administration (NARA) is to organize and preserve important records from U.S. history and increase citizens' access to the records. In addition to millions of historical documents, NARA's holdings also include photographs from NASA, and others taken by Ansel Adams when he was a government employee. While some records are available to members of the public who visit one of the agency's dozens of archives, federal document repositories and presidential libraries, most records are not easily accessible online, making it difficult for people to find, read and use them for research. In addition, NARA has almost a billion records, documents and photos that have not yet been digitized. Documents are not usually transcribed, so content is not searchable via NARA's electronic database. There is great demand for the materials, but a great deal of staff time is needed to make them usable.

NARA found it could crowdsource volunteers to help transcribe NARA's records so they can be shared digitally. Crowdsourcing involves broadcasting a request for information or services and then distributing tasks or challenges to those in the group of interested responders, when appropriate. To help with uploading and transcribing historical documents so they are easily accessible to the public, the agency turned to Wikipedia, a site whose community of moderators review contributions, to find people sharing NARA's goal of preserving knowledge and making

it more widely accessible. NARA chose Wikipedia because the site gets far more traffic in a year for one posted article than the archives.gov site receives for its entire database of documents and photos. For example, a Wikipedia article on the United States received 900 million page views in 2011, nearly 53 times the 17 million hits the whole National Archives site received that year.

ACTIONS TAKEN

NARA made the strategic decision to tap the specialized community of active volunteers, and their expertise and willingness to assist the agency. Crowd-sourcing is "volunteerism for the digital age," said NARA's Dominic McDevitt-Parks, whose title is Wikipedian in residence. The agency reached out to this already established community for numerous tasks, including for uploading to Wikimedia Commons, volunteer transcription and community "scanathons."

Thousands of images from NARA's holdings were uploaded to Wikimedia Commons, a Wikipedia project that collects, develops and disseminates information in the public domain or makes it available under a free license. Users can edit the tags—key words used to describe and search for images—making them more easily searchable in Wikimedia's database. Users also can report errors, so the agency can fix typos, misidentified or mistakenly attributed images or other problems with scanned images in the official record. For example, in one image, a naval ship was labeled "Savannah" when it was actually a photo of the Indianapolis. The official record was updated upon verification.

Volunteers working online are helping NARA to transcribe some of its holdings through Wikisource, a project of the Wikipedia foundation to build a library of public records, maps, letters and other sources in the public domain. The project provides transcribing software and has a growing community of transcribers who are making documents suitable for web presentation.

NARA hosted in-person events to get the Wikimedia community involved in its mission. It invited the local Wikimedia community to the National Archives for scanathon events. Hosted in repositories around the country, scanathons brought in about 100 people—who had to follow NARA's protocols for handling sensitive documents—to help scan NARA documents and photos for upload into Wikimedia Commons. In addition to the volunteerism, the goal of these events was to engage a new community with NARA and to put NARA subject-matter experts in contact with Wikipedia editors. The volunteers got "backstage passes" to the National Archives and, after being trained in the proper handling of documents, participated in the agency's work.

OUTCOMES

Volunteers transcribed and verified about 400 documents that had been uploaded to Wikisource over a year, a promising result for the relatively new effort. NARA has uploaded more than 13,000 images to Wikimedia that have been used in hundreds of projects, furthering its aim of circulating information from its holdings. The agency fostered awareness and involvement through in-person events, building collaboration between the online community and NARA researchers and helping the Wikimedia community understand NARA's offerings better. Members of that wiki community likely will look to NARA for content for future projects, helping to spread the information and knowledge even more widely through their individual projects and websites. More than 100 Wikimedia editors got involved in the work. While NARA continues to do most of its document digitization in-house, the Wikipedia connection is helping in its small way to make NARA's holdings more accessible on the Internet.

Insights for program managers

➤ Social media can promote volunteerism that assists with an agency's mission.

➤ Users of social media can be engaged in addressing an agency's critical needs; it can be surprising how many people in the general public are experienced or passionate about very narrow, specialty topics.

➤ Existing networks have built momentum and can provide a powerful way for program managers to access an audience.

➤ Designating and developing a staff member to be a "Wikipedian-in-residence" can help agencies explore the potential of Wikipedia for finding volunteers and publicizing resources.

Is this type of solution right for your federal program?

☐ Are there existing Wikipedia groups that have in-depth, specialty knowledge that could inform the work your agency does?

☐ Is your agency understaffed for the work that needs to be done?

☐ Do you have work that can be done by volunteers?

☐ Do you have resources or information that should reach as large an audience as possible?
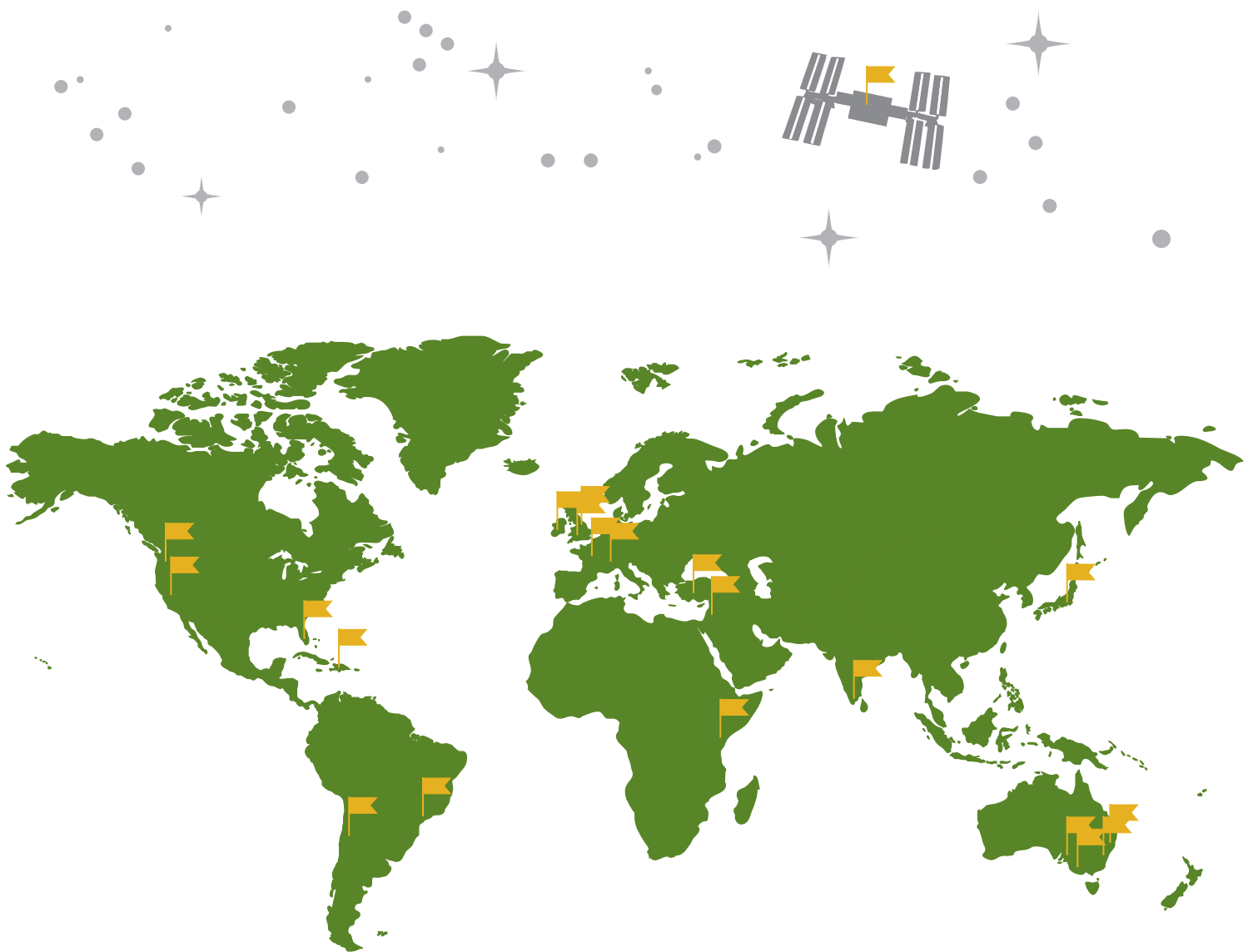
Engaging outside experts and innovators

The National Aeronautics and Space Administration gets help problem-solving by drawing on the collective knowledge of the public.

CHALLENGE

The National Aeronautics and Space Administration (NASA) tackles many enormously complex scientific and technological questions to attain its vision to "reach new heights and reveal the unknown so that what we do and learn will benefit all humankind." Although it has a highly talented workforce, NASA recognized it cannot always rely solely on in-house and contractor expertise. The agency wanted to be able to adapt existing technology or ideas for space—such as the ability to pour coffee in zero gravity (there is already a prototype) or to bake less crumbly bread at lower power than usual. Conversely, data or technology for space projects might also be used for solving global problems on Earth, such as how to farm more productively in developing countries.

ACTIONS TAKEN

NASA launched the International Space Apps Challenge in April 2012, using crowdsourcing for a mass collaboration effort and competition that drew on the collective knowledge of people outside the agency. The agency used a model similar to the one used by Random Hacks of Kindness, a group that brings software developers together for a two-day event, during which they try to solve challenges posed by partner organizations and pitch their ideas to judges. The NASA event was held in 25 cities in 17 countries and online, and the agency partnered with nine government agencies in the United States, the United Kingdom, Japan and Australia, as well as 90 other organizations that submitted challenges or helped with logistics and publicity.

More than 2,000 people with a variety of skills, and ranging in age from 16 to 70, formed in-person and virtual teams to tackle one of the 71 challenges. Fifteen challenges were proposed by NASA offices and the rest by other institutions and organizations. They fell into four categories: open-source software; open hardware; platforms for citizen-science contributions; and data visualization, which involves charts, graphs and other graphical methods for analyzing data. The challenges centered on issues related to space science, aeronautics, technology and exploration. For example, one hardware challenge was to develop a sensor for detecting atmospheric conditions or radiation, which can be plugged into a smartphone and used for NASA citizen-science missions that collect atmospheric data. Another challenge was to help NASA collect data from the Kepler spacecraft—a moving observatory designed to detect planets that orbit stars other than the sun—and make it more accessible or present it in a new way.

By launching a competition to help it meet its current challenges, NASA was able to interest a vast base of people with technical skills. The event was marketed through traditional and social media and went beyond the usual software programmer community.

OUTCOMES

At the end of the competition, teams submitted more than 100 solutions. Two from each location were submitted to an expert panel of judges, which chose seven winning solutions, including a "people's choice" award. The organizations that posed the challenges for the event reviewed the solutions, provided feedback and in some cases helped support the project's development. But the event produced more than those seven winning projects. In a follow-up survey, 40 percent of participants planned to continue with their projects, and another 25 percent said they would continue if they received funding or interest from the organization that had posed the challenge. One winning solution was an app that helped children and teachers visualize data from the Kepler Observatory so they could explore planets in other solar systems. Another app combined weather and soil data to allow farmers to decide on the optimal crop for their land, with the goal of maximizing production, particularly in developing countries. NASA's International Space Apps Challenge also demonstrated that crowdsourcing and competitions can help with solving even advanced and technical challenges facing government agencies.

Insights for program managers

- A compelling story can persuade a lot of smart people to donate their time and talents to help make a difference.
- Technologies created for space can be used to address real-world, global problems.
- Solutions can come from the general population, not just from within the agency.

Is this type of solution right for your federal program?

- Could your agency use assistance from outside experts to solve complex problems or answer technical questions?
- Are there specific challenges your agency would like to address that can be explained to outside individuals and organizations?
- Are there individuals or groups outside your agency who are working on interesting projects that might advance your agency's work?
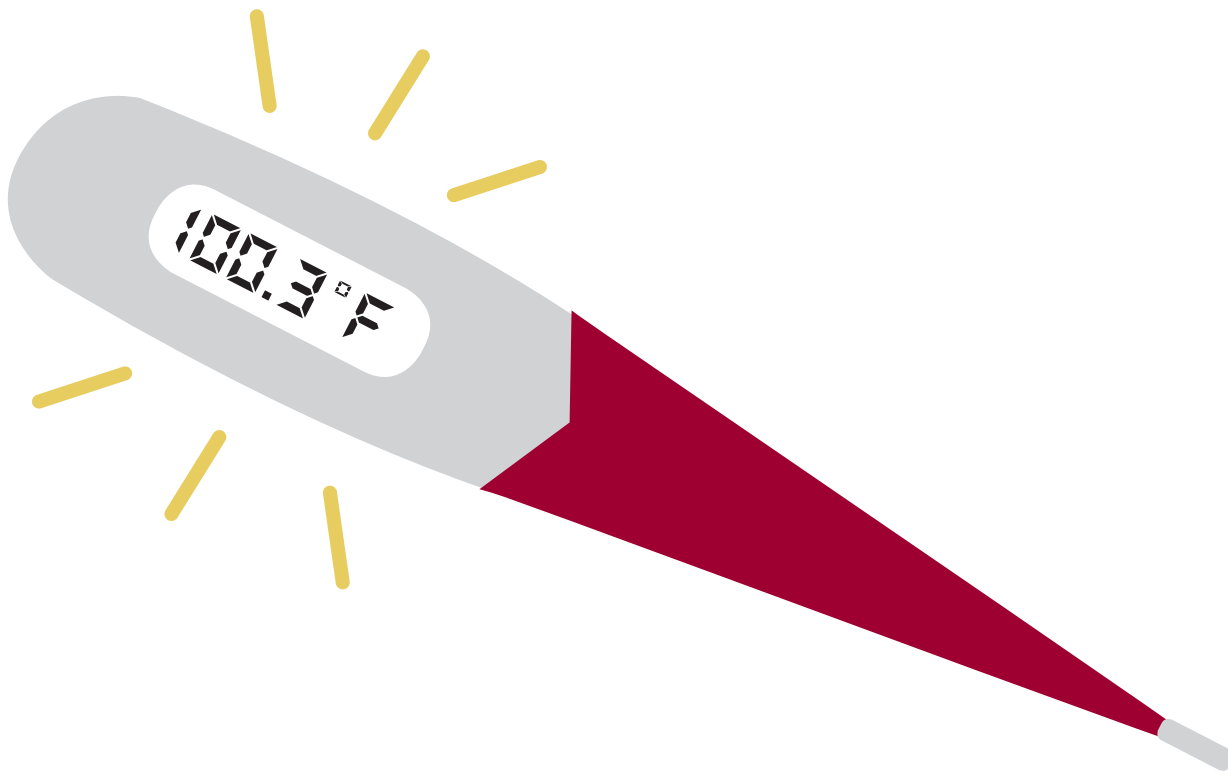
Collect data from around the country

The Centers for Disease Control and Prevention gets a jump on flu season with a nationwide surveillance network of labs, healthcare providers and health departments.

CHALLENGE

A flu epidemic in the United States costs anywhere from $71 billion to $167 billion annually, due to 30 million outpatient visits, 200,000 hospitalizations, 38 million school days lost and 41,000 deaths. Vaccines to guard against the disease have to be reformulated each year because there is no way to predict the next influenza virus, other than by observing how the strain has evolved since the previous flu season. Only when cases spike can the Centers for Disease Control and Prevention (CDC) determine what type of flu is infecting people for the current season, and that information helps produce the best protection for that year's epidemic. But there is a lengthy vaccine production process—it can take three to six months to develop, manufacture and distribute the hundreds of millions of doses needed to vaccinate 80 percent of the population, the level thought to offer "herd immunity" against further spread of disease. It is a constant challenge to produce enough doses of the vaccine in time to meet a growing epidemic. Any improvements that can shave days or weeks off the response time can potentially save thousands of lives. It also is important for CDC to learn where the hotbeds of infection are so they can mobilize and send teams out to investigate specific areas.

ACTIONS TAKEN

Health care providers, laboratories and state and local health departments voluntarily report outpatient "influenza-like illness" (ILI) data weekly, by age group, to the CDC, including the total number of patients seen and the number with such an illness. The program's goal is to capture community influenza data and build a nationwide picture of flu trends by analyzing the number of people who seek outpatient care.

Providers report their data through the Internet or fax to the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), a central repository of the CDC's National Center for Immunization and Respiratory Diseases.[4] The program aims to get reports on flu occurrence from one provider per 250,000 people in urban areas and from 10 providers total reporting from low-population areas. Ideally, these so-called sentinels report their flu data weekly. The initiative started as a collaboration with the American Association of Family Physicians and about 140 health care providers. During the 2009–2010 flu season, about 3,400 providers in the 50 states and the District of Columbia contributed data, although enrollment has dropped this year to about 2,900—a little more than half of which report each week.

OUTCOMES

In a survey of ILINet participants, half reported it took 15 minutes or less to report their data, and 39 percent reported it takes 15 to 30 minutes. CDC weights the data and then develops the national picture of virus activity, the geographic distribution of the disease and its clinical impact. Throughout the flu season, which runs from October through May, CDC publishes a weekly "FluView" surveillance report summarizing these findings. The data is accessible relatively quickly to flu manufacturers and distributors, health care providers, medical researchers, the media and the public. CDC now has enough historic data to allow recognition of flu patterns and to issue follow-ups and alerts to states. During pandemics, this system is also used to allocate resources where they are needed most and to send out CDC teams to hot spots.

CDC researchers recently worked with Google on the potential next-generation early warning system, called Google Flu Trends, which predicts flu epidemics on the basis of Internet search-term analysis. Researchers found a close relationship between how many people search for flu-related topics and how many people actually have flu symptoms. Not every person who searches for "flu" is actually sick, and not everyone sick with flu will take time off work or go to the doctor, but a definite pattern emerges when all the flu-related search queries are added together. Researchers compared query counts with traditional flu surveillance systems and found that many search queries tended to be popular exactly when flu season was occurring. By aggregating search queries, it is possible to estimate how much flu is circulating in different countries and regions around the world.

4   "Fluview: A Weekly Influenza Surveillance Report Prepared by the Influenza Division," Centers for Disease Control and Prevention, http://www.cdc.gov/flu/weekly (accessed 15 Nov. 2012).

Insights for program managers

➤ Social media allows data to be sent immediately from a problem site to one that analyzes that data; this reduces the time it takes to detect and react to problems.

➤ Search-term analysis that takes clues from the words people use in Google searches offers the potential for even more rapid identification of trends in the future.

Is this type of solution right for your federal program?

☐ Do you need to collect data from dispersed sources as quickly as possible?

☐ Do you need a way to display quantitative data trends?

☐ Is your data used not only to report, but also to predict events?

SOCIAL MEDIA MYTHS DEBUNKED

MYTH

Social media is simply another avenue for disseminating content as a function of public affairs.

REALITY

Although this may be true, virtually every agency that uses social media has realized the value of the dialogue with their audience. Social media can be used to communicate within an agency and from an agency to constituent groups or to the public; used throughout a project as it goes from development to completion; and employed for training, communications, mobilization, outreach and customer service. It can also be a way to save money and staff time.

MYTH

All the feedback we receive on social media will be negative, critical feedback that will cast our agency in a poor light.

REALITY

Much of the feedback agencies receive is positive. Often, when a user attacks an agency, other users step in to offer facts or defend it. Users frequently respond to questions from other users, such as translating technical terms into "English," offering quick answers, saving the agency's staff from having to respond and demonstrating that agencies need to take care to write in layman's terms. Agencies may still have to correct misinformation occasionally.

MYTH

You have to be on the cutting edge of technology to use social media effectively.

REALITY

Many of the common social media sites, such as blogs and Facebook, can reach broad audiences and do the job that agencies want. For example, Facebook still has more than twice as many users as Twitter, Foursquare and Pinterest combined.

MYTH

We will be inundated with responses and feedback, and this will overwhelm our people or systems.

REALITY

The input most agencies receive in their social media outlets is quite manageable. The General Services Administration, for example, receives an average of 80 comments per month.

MYTH

Social media is only for the younger generation. My audience is not going to be on that medium.

REALITY

Social media attracts a wide range of users, including a fast-growing older demographic, many of whose members are linked to their grandchildren through social media.

MYTH

Most comments on social media are not well thought out or constructive.

REALITY

While social media sites can be prone to abbreviated or irrelevant comments, most people who take the effort to respond to agencies' content tend to leave thoughtful comments and seek to contribute something. In any case, the negative comments can offer constructive lessons for improving agency activities.

MYTH

No one is interested in the material we would put on social media. It is simply too boring.

REALITY

It is not worth trying to guess what users will find interesting. "You'd be surprised what people geek out about," said one interviewee.

MYTH

Maintaining a social media presence takes too much money.

REALITY

Sophisticated measurement analytics tools can be expensive, but the use of most social media often is inexpensive or free and can save money spent on other methods for getting the message out.

EFFECTIVE SOCIAL MEDIA IN GOVERNMENT

The case studies featured are just a small selection of examples demonstrating how federal programs have used social media effectively to meet their mission goals and objectives. For each of the case studies, no matter what technology was used or what objectives the initiative was trying to achieve, three major success factors were consistently cited:

- Think strategically about how to use social media to support agency mission and achieve program outcomes.
- Get past the tactical hurdles that can stand in the way of meaningful implementation.
- Continually learn and adapt to derive the most benefit from social media initiatives.

Think strategically about how to support mission and programs

For a social media effort to be effective, it has to be tied directly to program missions and goals. There needs to be a clear understanding of how various social media will be used to support mission outcomes, according to virtually all of the social media experts we interviewed. Agencies need to know what they plan to achieve to ensure that they choose the appropriate social media platform and the correct performance measures to judge the tool's success, they added.

To understand how social media can advance a goal, agencies have to define what their goals are, interviewees said. This process also can provide agencies with new and different ways of doing business and deploying their resources. Failure to act strategically jeopardizes a project's success and can cause unintended consequences. Interviewees said agencies need to keep an eye on their mission, be ready to correct misinformation, continue to learn, value information-sharing, look for outside talent and figure out who takes the lead. It also is important to examine the potential risks, benefits and costs of social media use, including staff time. This is particularly true when budgets are increasingly constrained since, as one interviewee said, "You're asked to do more with less or, as I like to say, 'everything with nothing.'"

Keep an eye on the mission
Strategy sessions on whether to use social media should focus on whether such an initiative advances the mission of project, program or agency. "If it fails to satisfy that test, do not do it," said an interviewee who is well versed in how social media is used by his agency. Program managers cautioned against capricious use. One interviewee used the term "cliff jumpers" to refer to agency staff who leap to use social media before fully considering its worth for the agency. It usually happens when someone asks for an account on Twitter or Facebook without regard to whether these tools are appropriate for the audience. People might "cliff jump" just to create an account and seem trendy, but there can be unintended consequences. For example, if a Facebook or Twitter page is not deployed strategically, it might be updated for a few weeks and then be left unattended, making an agency or program look unresponsive and the website outdated. Program managers should no more ignore someone on a social media platform they created than they would someone who comes to their desk with a question. This interviewee said he has to "talk these people off the ledge all the time." To do so, he helps program managers consider the relevance of the proposed social media for program or project objectives.

The same holds true for mobile applications. With the advent of ubiquitous mobile access, many agencies use phone apps to provide citizens with the information they need, when they need it and where they need it, in line with agency goals. These should support the mission and be updated as needed. For example, the National Forest Service's app for campers and hikers addresses one of the largest dangers in forests—unintentional fires caused when people are careless or their campsite fires burn out of control.

This "Smokey Bear" app[5] provides park users with step-by-step instructions for building and maintaining a fire and then making sure it is out. U.S. Customs and Border Patrol created an app[6] that informs passengers in real time how long the wait is between getting off their plane and being cleared through customs, helping to reduce the stress and anxiety many air travelers experience.

Understand the benefits and drawbacks of social media
When strategizing about the possible uses of social media, get a proper understanding of its capacity and role. It is not a silver bullet. In the same way that people had to understand that computers are only as good as the information human beings enter into them—as in "garbage in, garbage out"—social media will not miraculously fix an organization's communication, budget, performance or management issues. In fact, several

5   "Smokey Bear," U.S. Forest Service, USA. gov, http://apps.usa.gov/smokey-bear.shtml (accessed 27 Nov. 2012).

6   "Airport Wait Times," U.S. Customs and Border Protection, USA.gov, http://apps.usa. gov/airport-wait-times.shtml (accessed 27 Nov. 2012).

federal social media program managers said the use of social media can end up exposing organizational problems. In these cases, the inefficiencies are not caused by the social media or necessarily fixed by them. But it could be a benefit for the agency to learn about problems it had not been aware of and have the opportunity to address them.

Concerns about social media include fears the public will gain a forum for giving negative feedback and that employees will say the "wrong things" online. However, if employees are saying the wrong things on social media, it is likely they already are making incorrect statements in the halls, in emails and at meetings. The benefit to seeing the incorrect or improper information on social media is that, unlike unheard hallway conversations, there is an opportunity to learn about this spread of misinformation and respond quickly to correct it among employees or the public. For example, during the first critical days after the 2011 nuclear crisis and the beginning of radiation leaks in Japan, some commentators were spreading incorrect information online about how to use potassium iodide in a nuclear emergency, according to an interviewee. The CDC used its website and Facebook page to curb the panic that had Americans far from the radiation site taking the drug unnecessarily.

> "Cliff jumpers" are agency staff who leap to use social media before fully considering its worth for the agency. It usually happens when someone asks for an account on Twitter or Facebook without regard to whether these tools are appropriate for the audience.

Understand agency policies
Agencies often need to know the best practices or legal constraints relating to a project or program. It is possible that someone in the 2.1 million-strong government workforce[7] has addressed that issue or is working on it. Connecting agency employees so they can benefit from knowledge and experience in other departments and agencies can be highly useful. GSA's website has an abundance of how-to and best-practice information that outlines what agencies are doing with social media and how to get started.[8] It also is useful for social media experts scattered throughout one agency to discuss with others in the agency possible ways to deploy social media.

When it comes to understanding the legal issues related to social media, government employees often are at a loss. Many can recall when agencies severely regulated Internet use. Ever-changing and complex terms-of-service issues, as well as privacy, confidentiality or security concerns, can deter risk-

averse agencies from trying new social media tactics. Employees may mistakenly assume that they are not allowed to do much with social media tools. But different agencies may interpret legal parameters differently, and employees who have heard about legal issues elsewhere in the government may be unnecessarily wary of exploring the social media terrain. Federal workers need to know how to seek guidance on the law as it relates to social media, just as federal workers had to familiarize themselves with and adapt to regulations in the Paperwork Reduction Act and 508 Compliance.

The GSA provides clear guidance on how to use social media without stepping on legal landmines. Managers who desire contact information for individuals at their agency who can help them comply with federally approved terms-of-service agreements can find them at HowTo.gov on the "Agency Points of Contact"[9] page; those who would like to contact their agency's representative can go to HowTo.gov's "Members of the Federal Web Manager's Council"[10] page. HowTo.gov

7   U.S. Office of Management and Budget, *Analytical Perspectives-Budget of the United States Government, Fiscal Year 2013* (Washington, DC: GPO, 2012), 120, http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/management.pdf (accessed 1 Aug. 2012).

8   "Verify U.S. Federal Government Social Media Accounts," USA.gov, http://www.usa.gov/Contact/verify-social-media.shtml (accessed 15 Nov. 2012).

9   "Agency Points of Contact," HowTo.gov, http://www.howto.gov/web-content/resources/tools/terms-of-service-agreements/agency-points-of-contact (accessed 15 Nov. 2012).

10   "Members of the Federal Web Manager's Council," HowTo.gov, http://www.howto.gov/about-us/members (accessed 15 Nov. 2012).
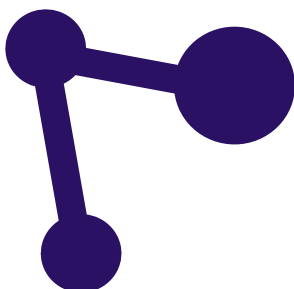
is just one of many sites offering resources on using social media. GSA provides easy-to-understand legal guidelines via a variety of online links and portals, including its Social Media Navigator,[11] interviewees said.

Value information-sharing

No matter how sophisticated the medium, it provides little advantage if people are not willing to share and seek information there. An agency supportive of social media values the ability to share information and to learn from it. It also recognizes and rewards employees whose behavior reflects those values. "If you reward hoarding, that's what you'll get," explained one interviewee, referring to some employees' penchant for keeping information in one place such as a cabinet or desk. On the other hand, incentives can encourage the use of a new social media outlet or app.

Welcome outside talent

When taking inventory of program or project resources, it is important to include outside talent as a potential resource, one interviewee said. Expert professionals in the private or nonprofit sectors have seen the challenges and opportunities of using social media and can discuss the real-world problems of using data. Outside specialists can:

- Add credibility to a strategy a program manager proposes, increasing buy-in from stakeholders
- Provide useful experience and perspective
- Transcend internal politics
- Share specialized knowledge and expertise
- Shorten the learning curve

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11 "Guidance for the Official Use of Social Media," U.S. General Services Administration, gsa.gov, http://www.gsa.gov/portal/category/101299 (accessed 15 Nov. 2012).

Work within the agency's social media structure

Agencies often debate who should control social media and whether it should be centralized or decentralized, and these decisions affect how program managers move forward with their plans and how their strategies can be carried out. There are tradeoffs to the question of centralized versus decentralized, and delays in choosing the path forward can hinder the strategic-planning process. The choices, often decided above the program level, include whether there is one agency account for a particular social media platform and whether the content on the site or applications is controlled by a single person or team, or several people or departments across the agency. Factors that influence that decision include agency size, diversity of missions, resources and expertise, and geographic distribution of offices. The onus is on program and project managers to understand their agency's social media structure and guidelines and continually monitor them for changes.

Centralized mechanisms allow for greater efficiency and accountability, while decentralized mechanisms allow for greater flexibility, speed and customization. Our interviews showed that there are ways past this polarizing debate. One possibility is to have a centralized office that recommends consolidating social media accounts when appropriate. In this way, a centralized office has an overview of the agency's activities but does not have to grant authority to subordinate offices and offer information and advice. The central office also may choose to maintain the main account, but others might open their own accounts. For example, an interviewee said that NASA does not have to authorize social media use by individuals, but when an office, project or person is interested in starting an account, the central office is able to tell them

what other groups are already doing. This advisory role enables groups to cross-promote each other's work, enhance their specialization and penetrate audiences better by taking advantage of networks their peers have already established.

Another strategy for overcoming the inherent tensions between centralized and decentralized social media structures is to have a centralized website or app maintained by users dispersed throughout the agency. An agency can have one account on each platform and encourage contributions from various people or offices. For example, DOE solicits volunteers from across the agency to participate in video chats, said an interviewee. Scientists can offer their expertise during a real-time session without having to worry about the technical elements of social media management or having to appear routinely. These chats allow scientists and other employees to feel like they are contributing to social media, and to the program, agency or project goals that social media is assisting with, without having to become an expert in using them.

Get past tactical hurdles

When implementing social media strategy, be aware of common pitfalls during execution. These include disinterested leadership, the ever-evolving social media landscape and the difficulty of measuring social media's impact. Knowing the possible solutions increases the opportunity to react to unforeseen hitches and find hidden opportunities. For the best results when implementing social media, set expectations and guidelines early, get leadership interested, train people to keep up as the social media terrain changes and find ways to measure the effectiveness.

Set guidelines and expectations early for implementation

Develop policies and strategies governing social media use, if they do not exist already, and integrate use of these tools into program strategies. Rely on these policies and strategies for new projects, when it is time to expand capacity, when it is important to reach out during critical phases of a project, or when it is necessary to respond to outside events. Starting the social media strategy in a new project allows time to build an audience for it. Time is needed to "prepare for war during peacetime," said one of our interviewees. Preparation involves building solid relationships between social media experts and project managers in the agency. Articulate what social media will achieve for a program or project, since those responsible for social media often see the world differently from project managers, interviewees told us. Many people in the federal workforce believe that social media is relevant only to the "technology geeks" in the back room, not to them. "Ironically, the person

in charge of the social activities can often be the most lonely person in the agency," an interviewee said. To start a social media initiative or get one approved, have answers to questions such as:

- What problem is being addressed?
- Who needs to be reached, and what should they do with the information?
- How does social media help achieve mission goals?
- Who will be responsible for updating or maintaining the social media?
- Is there a similar initiative within the agency? If so, why is it more effective to start a new platform or initiative rather than join and strengthen a current initiative?
- What are we able to do through social media that we cannot do through traditional media?

Social media managers should create resources that will help program managers govern social media use. These can include links for the agency's social media use policies; a decision tree to know when social media is the right choice; how-to guides that answer the most frequent questions about operating the current platforms available; and contact information for those who can offer strategic or technical assistance. The CDC's page[12] for social media tools, guidelines and best

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12 "CDC Social Media Tools, Guidelines and Best Practices," Centers for Disease Control and Prevention, CDC.gov, http://www.cdc.gov/SocialMedia/Tools/guidelines (accessed 15 Nov. 2012).

practices is a good example of the information that is helpful for the management of social media.

Get leadership interested

Senior leadership buy-in is important for allowing the freedom to innovate and clearing initial funding hurdles for staff time or expenses, and it can help establish a culture of acceptance, according to our interviewees. "Leadership has empowered us and believed ... we had knowledge to play in the space and do it well. We would not be able to do what we do if we did not have that level of empowerment," said one interviewee. The fact that FEMA Administrator Craig Fugate was active on Twitter enabled social media pioneers within the agency to advance widespread use of social media at the agency quickly, a FEMA interviewee said. Some senior leaders at the secretary level "get" social media, but others may not. Securing leadership buy-in from immediate supervisors or senior leaders can be difficult. But several approaches can help obtain it—demystify the tool, give leaders a stake in its success and explain the benefits of social media by using numbers or anecdotes.

Demystify the tool: This step includes more than using PowerPoint training to show a leader how to use social media. It re-

quires one-on-one time at the desks of leaders whose buy-in is crucial in order to show them the platform, train them in how to use it, allow them to practice and demonstrate the potential payoffs. Team leaders or members may find they need to define certain words or platforms and should be ready with easy ways to explain terms such as "retweet," "friend" used as a verb or "meme," which is an image, link, video, word or concept on the Internet that spreads via social networks, blogs, email or other electronic means. The job of demystifying gets much easier when these social media platforms are used at home. More than one senior leader we interviewed said that after they got a Facebook account to keep up with their grandchildren, they recognized the benefits that could be realized by supporting Facebook initiatives in government.

Give leaders a stake: Senior leaders are more likely to see the value of social media when they have some ownership of the process. It can help if leaders are set up with their own account and password and understand how social media can be used to help them do their job better or faster, or to reach more people more effectively.

Many people in the federal workforce believe that social media is relevant only to the "technology geeks" in the back room, not to them. "Ironically, the person in charge of the social activities can often be the mostly lonely person in the agency," according to one interviewee.

Use anecdotes: If senior leaders are skeptical about social media, it helps to offer examples that help make the case. It is more powerful to explain, for example, that an agency will be able to reach 30,000 people within 24 hours, than to say social media will help advertise a service to "more" people. It also is important that leaders understand the facts. Some interviewees warned that senior leaders might assign too much value to the number of website visits or media mentions. But the number of followers may be less important than the deeper involvement of followers through retweets and online comments. While numbers clarify, stories motivate. Sharing the news that the agency just hired a program manager whose initial outreach was through a social media page the agency uses adds context to whatever numbers are shared.

Train accordingly as the social media landscape evolves
The social media landscape continues to advance, and it often is difficult to keep up with changes and developments. What is new and cutting-edge today will be made obsolete by tomorrow's innovation. Training that focuses only on tools may become irrelevant quickly. The best training is tool-agnostic and customized for reaching the intended audi-

ence. It should focus on developing employees' communication skills and on how to engage a social media audience. Once employees know the basics of the social media platform's technology, they need to listen to what their audiences are saying and understand how they want to interact with the agency, and what the agency can learn from them.

Many employees may try to avoid social media, saying they do not know how to use it. That often masks other reasons why they do not want to embrace a new social media strategy. They may not understand it and might feel less than competent in using it. To ensure their social media initiative is effective, program managers should investigate whether their agencies provide social media training, getting trained themselves, if necessary, and encouraging it for team members and anyone else who lacks social media skills. This training also could be provided by GSA or the private or nonprofit sector. Program managers should determine if the training can be tailored for their particular program. Once trainers are identified, they will have to assess employees' skill levels and modify lessons accordingly. The training can be done one on one or in larger classroom settings and can be enhanced by using examples specific to the trainee's work.

Trainers likely will encounter a range of individuals with varying comfort levels with social media. We have labeled them and identified some high-level training tactics to employ for each:

:-)

THE EARLY ADOPTER

Early adopters are employees who are quick to understand and implement new technologies and policies. A trainer can highlight these individuals as good people to field colleagues' questions or train others.

:-D

THE LEAD USER

Lead users are employees who can see what the trends in social media will be before they become trends, and it could pay to empower them to explore new functions of social media during select work times. They also would be good as leaders of brown bag discussions or training sessions. If program or project managers know lead users who tap into social media frequently in their free time, they should consider interviewing them on how they would like to use it at work.

:-X

THE HABITUAL WORKER

These include employees who do not have the time or interest to use a new technology until they are trained and shown its impact. Most workers fall into this category. Trainers should make sure these individuals can arrange their schedules to be able to attend training sessions and have the flexibility and incentives to practice until they "get it."

8-)

THE FOCUSED SENIOR LEADER

The focused senior leader includes any leader whose attention to other strategic goals has not allowed deep study of social media tools, their value or their use. Trainers or managers can reach these individuals by routinely sharing success stories and useful data from a social media initiative.

:-/

THE SKEPTIC

The skeptical worker includes those who have misunderstandings about social media. They are unconvinced that it will work, save time, be inexpensive or meet the objective. These individuals are influenced by myths. As with the senior leaders, trainers or managers can reach these people by sharing good anecdotes and metrics. One interviewee said, "Numbers have a way of debunking myths."

>:-|

THE CAVE DWELLER

CAVE stands for consistently against virtually everything, and as the name implies, these "anti-change agents" are opposed to new ways of operating. Trainers and managers should not feel compelled to waste an inordinate amount of time reaching them since they are unlikely to get them to budge.

Measure wisely and creatively

It can be difficult to measure the impact of social media beyond the numbers of page views or comments. Many program managers are relatively new to it, and measuring its impact is newer still. "I have never met anyone in government who was happy with the way they were measuring or reporting social media efforts. Ever," said a social media manager at one agency. "The most advanced measurement tools can be costly, and who has $50,000 extra in their budget? No one." It is not crucial to rely on costly analytics or software to measure social media, and tight budgets often make that option unlikely. It is, however, crucial to focus on establishing measurable program objectives so program managers know which measures to watch. Once the objectives are identified, it becomes clearer what type of analytics may be appropriate, and a wide variety of data and measurement tools for analyzing, exploring and acting upon that data.

The web analytics field continues to grow and become more sophisticated, offering more solutions for analyzing the effectiveness of social media sites. Most agencies have web analytics platforms measuring traffic, and sites such as Facebook and Twitter also provide free analytics tools offering information and a sense of how well their pages are doing. For example, Facebook provides the number of "likes," "shares" and comments, and Twitter furnishes the number of followers and retweets. Google Analytics reports how visitors arrive at the site, how they use it and how they interact with its sharing features. Another tool measuring audience engagement looks at the number of a site's posts and audience size in the previous 12 months. Program managers need to choose the analytics tools most likely to improve reporting and analysis, align with their program objectives and save them time.

Continue to learn and adapt

Be on the lookout for social media pitfalls, but also understand that employees will likely make mistakes while executing a social media initiative because they are trying new things and interacting with people in real time. They will be more likely to succeed if they learn as they go and adapt the initiative as they gain insights along the way. To unlock the potential of social media, evaluate content routinely and customize it specifically for the platform, whether it is a blog, a wiki or Twitter. When launching or expanding an effort, do not be afraid to make mistakes, value user feedback and make sure to customize content appropriately.

Do not be afraid to make mistakes

As social media is implemented, do not be afraid to make mistakes. Allow employees to explore the full possibilities of an initiative, even if it means they might stumble before they get it right. Be open to unforeseen outcomes and interesting opportunities, and learn from them. The earlier these unexpected possibilities are explored, the easier it will be to make mid-course corrections to social media initiatives. Since mistakes likely will happen during a rigorous exploration of an initiative's possibilities, maintain a good exit strategy that details the point at which the social media initiative is not producing the results intended for a project's impact, security, budget or time. That line in the sand for ending experimentation will vary from one circumstance to the next.

Value user feedback

Social media can help an agency reach an unexpected audience, due to the more random, distributed and accessible nature of online conversations. Unlike a typical project report that involves soliciting and compiling feedback over weeks or months, social media tools can help improve and innovate programs in a much shorter time. During a pilot project, early feedback via social media can provide insights and useful comments throughout the pilot and beyond. They can be used to determine whether to scale up, change direction, discontinue or overhaul a program or project.

For piloting projects: Any project or program can benefit from an initial demonstration project, a soft launch or beta testing. Successful pilot projects make a better argument for a project than projections about what might happen, and they help elicit support and assistance from colleagues and leaders who didn't originally understand the project's potential. The State Department took this approach to deliver English-language instruction via a phone app and incorporated early and ongoing evaluation of the initiative with users through Skype, a communication tool that provides online video phone service. Users of the language app gave the department ideas on how the software could be improved, for example, by adding a dictionary and bookmarking functions. Within 90 days of the phone app's launch, the department completed and evaluated the pilot program with the help of customer feedback.
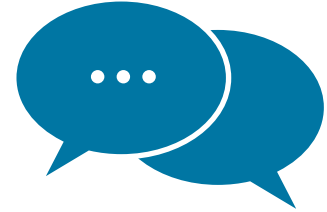
For soliciting new ideas: The Transportation Security Administration uses the Idea Factory, an internal collaborative website that allows TSA employees to offer innovative ideas for programs, processes and technologies within the agency and to develop, promote and advance those ideas. In two years, the Idea Factory has generated more than 9,000 contributions. TSA has instituted more than 40 of those employee ideas, which have helped improve agency operations and include, for example, creation of an incentive program for recruiting transportation security officers (TSOs) and a website that allows TSOs to post their interest in swapping job locations.

Instead of waiting for the results of an annual report, implement social media and get information and answers more quickly. Getting and applying new information on trends and developments can help with evaluating and managing projects more effectively, and shorten time to maturity.

Customize content for the platform and the audience

Being able to customize a message, based on the social media platform and the audience viewing it, allows for more targeted and clearer com-

Many agencies try to cast their communications nets widely, assuming they should attempt to reach everyone, but that broad approach is not typically effective.

munication that will increase the likelihood the intended audience will receive and act on the message. Consider the restrictions of various social media tools, such as the 140-character limit on Twitter or limits on the length of YouTube videos. Also consider different social media choices. For example, videos can be posted on either Vimeo or YouTube. The chief questions to ask when considering social media are:

- Who is my audience?
- How do they want to communicate with me?
- How can I most effectively reach as many of them as possible?

Many agencies try to cast their communications nets widely, assuming they should attempt to reach everyone, but that broad approach is typically not effective. Think about who cares about your agency's message and who else should. Before launching a page, site or app, take note of ongoing conversations on different platforms to understand how to engage those audiences. Unique or specialized terminology could get in the way of an agency's message. NASA, for instance, uses terminology that even the most interested, sophisticated audience might not always understand. When NASA program managers were reviewing their online content, they noticed that some users were asking what certain terms meant and other users were translating for them. They realized they had to "de-geek" certain phraseology so their audience would have less difficulty

comprehending online information. Now NASA switches in certain terms such as:

- Spacewalk for "extra-vehicular activity"
- Robotic arm for "Remote Manipulator System"
- Attaching or docking for "berthing"
- Jupiter-sized planet instead of "Jovian planet"

When the Centers for Disease Control and Prevention (CDC) wanted to engage a younger audience, the Office of Public Health Preparedness and Response decided to run some posts featuring a "zombie apocalypse" on its blog. Playing off a popular trend in video games, movies and books, they reached an audience they typically struggle to connect with. The tongue-in-cheek posts about the walking dead and preparations for the zombie apocalypse brought the CDC 10 times its normal blog traffic. The posts generated nearly 800 comments and were covered by major news outlets.

CONCLUSION

As the public demand for real-time, digital interaction with government services and benefits continues to rise, federal agencies must move to create an environment in which government employees, citizens and elected officials engage seamlessly across the web, social media and mobile, as well as in person.

Many program managers have already started to take advantage of social media and other digital technologies to enhance how they achieve their program objectives. They understand that the use of social media is not just a passing trend, but rather a mechanism for advancing effectiveness in their program and in government overall. They are expanding outreach, dispensing information, improving communication, gaining knowledge, improving transparency and accountability, and achieving their missions. Equally important, they are meeting the expectations of the public they serve.

METHODOLOGY

The Partnership for Public Service, in collaboration with Booz Allen Hamilton, set out to identify specific examples of government agencies using social media to achieve their mission goals. We performed a literature review to gain an understanding of the social media sphere and the federal environment and to identify key social media initiatives in the government. From July through September 2012, we engaged in conversations with social media leaders who identified examples of effective social media use in government. Then, based on these perspectives, we delved deeper into agencies to interview program-level employees and social media initiative "owners" who were using and actively engaged in these social media initiatives.

We targeted a range of agencies with a variety of social media initiatives, ultimately conducting interviews with 26 individuals from 12 agencies or offices. These include:

- Alabama Emergency Management Agency (AEMA)
- Central Intelligence Agency (CIA)
- Department of Agriculture (USDA)
- Department of Defense (DOD)
- Department of State
- Department of Energy (DOE)
- Department of Homeland Security (DHS)
- Department of the Interior (DOI)
- General Services Administration (GSA)
- Department of Health and Human Services (HHS)
- National Archives and Record Administration (NARA)
- National Aeronautics and Space Administration (NASA)

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