



A Manager's Guide to Assessing the Impact of Government Social Media Interactions



A Manager's Guide to Assessing the Impact of Government Social Media Interactions

Ines Mergel

Associate Professor of Public Administration
Maxwell School of Citizenship and Public Affairs
Syracuse University



IBM Center for
The Business of Government

Table of Contents

Foreword	4
Executive Summary	6
Preface: A Survey of the Social Media Measurement Landscape	7
Social Media Dashboards and Monitoring Tools	7
Social Media Reporting	8
Understanding Social Media Measurement	10
Designing a Metrics-Based Social Media Strategy	13
Design Phases	13
Goals of Social Media Use	15
Aligning Metrics with Social Media Goals	18
Understanding Different Social Media Communication Modes	18
Measuring Social Media Interactions	19
Making a Business Case with Numbers	26
Interpreting Measures and Acting on the Insights	26
Fulfilling the Open Government Initiative's Mission using Social Media	26
Appendix	30
Research Design	30
Additional Resources	31
References	32
About the Author	34
Key Contact Information	35

Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *A Manager's Guide to Assessing the Impact of Government Social Media Interactions*, by Ines Mergel, Syracuse University.

The report builds on Dr. Mergel's previous two reports for the IBM Center: *Working the Network: A Manager's Guide for Using Twitter in Government*, and *Using Wikis in Government: A Guide for Public Managers*. This new report addresses the key question of how government should measure the impact of its social media use. This question is gaining increased attention within government as agencies rely more heavily on social media to interact with the public, including disseminating information to citizens.

Many believe government has been successful in using social media over the last decade. Social media has also greatly assisted the current administration in fulfilling its Open Government Initiative to increase transparency, participation, and collaboration. Government managers now face the challenge of more effectively measuring public participation and the impact of social media outreach efforts. A key additional step involves the development of a social media strategy for an agency.

While government currently focuses on "push" techniques to provide information from government publications, Professor Mergel speculates that the next big challenge will be to measure the extent to which government actively engages the public to gain access to citizen views and expertise. Professor Mergel envisions increased bi-directional citizen participation in which agencies actively "pull in" content through new forms of social media, including crowdsourcing. In a recent IBM Center report, *Using Crowdsourcing in Government*, Daren Brabham discusses how government can tap into citizen knowledge via crowdsourcing.



Daniel J. Chenok



Lori Feller

In the report, Professor Mergel also provides guidance to government managers on how they can more effectively make a business case for using social media. The business case, states Mergel, serves as a basis for management decisions to build and allocate organizational capacity or initiate changes in its social media strategy.

Given the rapidly increasing use of social media by government, we hope that this timely report assists government managers in assessing the impact of their social media activity.



Daniel J. Chenok
Executive Director
IBM Center for The Business of Government
chenokd@us.ibm.com



Lori Feller
Social Business/Mobile Market Category
Leader, Public Sector
IBM Global Business Services
lori.feller@us.ibm.com

Executive Summary

Social media applications have become part of government's standard repertoire for:

- Reaching out to constituents
- Reusing content posted to agency websites
- Reaching audiences that might not be reachable through traditional communication means

However, it is still a challenge to understand whether social media use is making a difference to citizens, improving their trust in government, increasing accountability, or making government communication more effective and efficient. In a world where social behavior is traceable online, public managers should carefully monitor whether their online interactions are having an impact on citizens, and use insights derived from social media measurement tools to adjust their online tactics.

This report ties social media efforts to the strategic goals of the Obama administration's Open Government initiative and provides insights on how social media interactions can help increase collaboration, participation, and transparency by harnessing the use of new technologies. The insights here are derived from qualitative in-depth interviews with social media managers in the U.S. federal government, review of existing social media strategies and policies, and academic literature study.

This *Manager's Guide* is designed to help government agencies assess the impact of social media interactions. The first requirement is a well-designed social media strategy that supports the core mission as the basis for all online interactions. Second, government organizations should create online tactics to support their mission requirements and monitor and evaluate online interactions with citizens.

The report presents the most common measurement practices used in government:

- Breadth
- Depth
- Loyalty
- Sentiments through qualitative insights
- Combining offline and online data

As a result of the monitoring efforts, agencies can adjust their social media behavior and abandon ineffective tactics or increase successful interactions.

This report provides a guide on how to make a business case with social media numbers to help top managers understand social media impact. The business case can serve as a basis for management decisions to build and allocate organizational capacity or initiate changes in social media strategies as well as daily tactics. The report includes a section with the most common and currently free social media measurement tools.

Preface: A Survey of the Social Media Measurement Landscape

Many free measurement tools use the application programming interfaces (APIs) of social media tools to aggregate information. Some agencies use their own in-house tools and others use third-party commercial solutions. However, agencies with a budget to acquire third-party tools have relatively low trust in these tools. One social media director tells us:

There are really good tools. I like the fact that I can dive into things. I can get some instant graphical representations of how things are going, but at the same time, it is really tricky. While I trust the trending it gives me, I don't trust the volume metrics it gives me, because I can solely go and do some searches, and look and get a feel that there is more. No social media tool or analytic is perfect unless you are going to hand-code everything—and nobody has time for that.

This also explains the wide variety of analytical practices across government agencies and shows the limitations.

Social Media Dashboards and Monitoring Tools

Some government agencies do not rely on third-party measuring and monitoring tools and instead work out in-house solutions to track what matters to them. Another social media director says:

We are now looking at measures of reach in addition to just followers. We have put together a dashboard that tries to get an assessment of how many individuals were reached by the message by looking at people's followers and how many retweets have occurred.

SocialMention.com is a free tool to search and analyze aggregate user-generated content from social media platforms, including Twitter, Facebook, YouTube, Google, or Digg. Searches can be based on specific Twitter hashtags, social media account names, or simply general keywords.

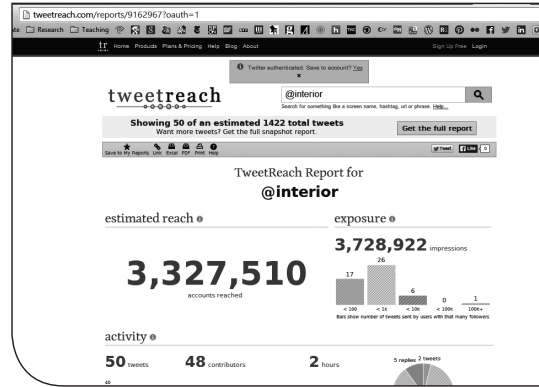
The result is a list of the most recent mentions of the search item across all social media platforms, as well as a sentiment analysis (positive, negative, neutral mentions), the top related keywords used in the social media updates, and the top users referring to the search term.

Figure 1: SocialMention of Twitter hashtag #socialgov



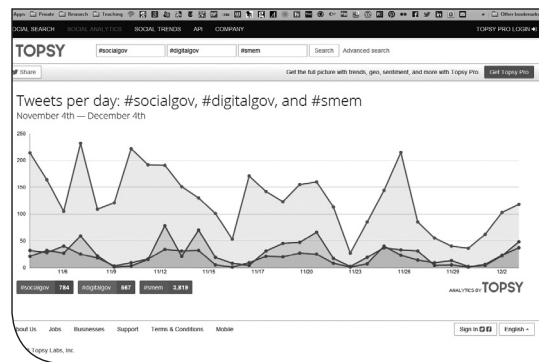
TweetReach.com. Another free tool is TweetReach.com, which analyzes the activities of individual government Twitter accounts. In the example here, using the Department of Interior account (@interior), the tool provides insights into how many Twitter accounts are reached by the agency's updates. In addition, numbers about the exposure as calculated by the number of Twitter users reached through retweets of @interior's followers, a breakdown of the most retweeted content, and other insights including main contributors are provided.

Figure 2: TweetReach.com Using @interior Twitter Account



Topsy.com. Topsy.com is a free tool that helps social media directors compare the attention different government-related issues receive online. The graphic shows the attention three different Twitter hashtags: #socialgov, #digitalgov, and #SMEM (social media in emergency management) received during one month.

Figure 3: Comparing Issues People are Talking about on Twitter



TweetDeck. TweetDeck includes a quick review of the number of retweets or shared updates occurring in other social media accounts. TweetDeck's main purpose is to compose and schedule social media updates and organize feeds by hashtags.

Figure 4: TweetDeck.com



Social Media Reporting

Social media reporting has become one of the most important activities social media directors conduct to justify their investments in online activities other than visits to the official e-government sites an agency is hosting. Google Analytics can be used to understand which social media tools attract the most users to the agency's core content on its own website. Internal needs to collect and monitor vary widely across agencies. While some do not report details to top management, others have a specific reporting schedule to provide insights to superiors:

We have done monthly and quarterly [analyses] in the past. Unfortunately, they tend to be very manpower-intensive to develop. We will probably stick to quarterlies and not monthlies with the idea of taking a longer view of things. "Here is how we talk, or here are the subjects that pop up, here is what we did, here is how we fared as far as being able to effectively communicate."

The goal of social media reporting is to gain support from top management to continue or even expand social media activities. However, this means that social media directors need to raise

managers' awareness of their agency's social media impact. This will in turn build knowledge (and often increase digital literacy), ultimately leading to additional support for investments in human capital, additional resources, and budget increases for social media activities. The following textbox shows the logical path to generate these "soft results":

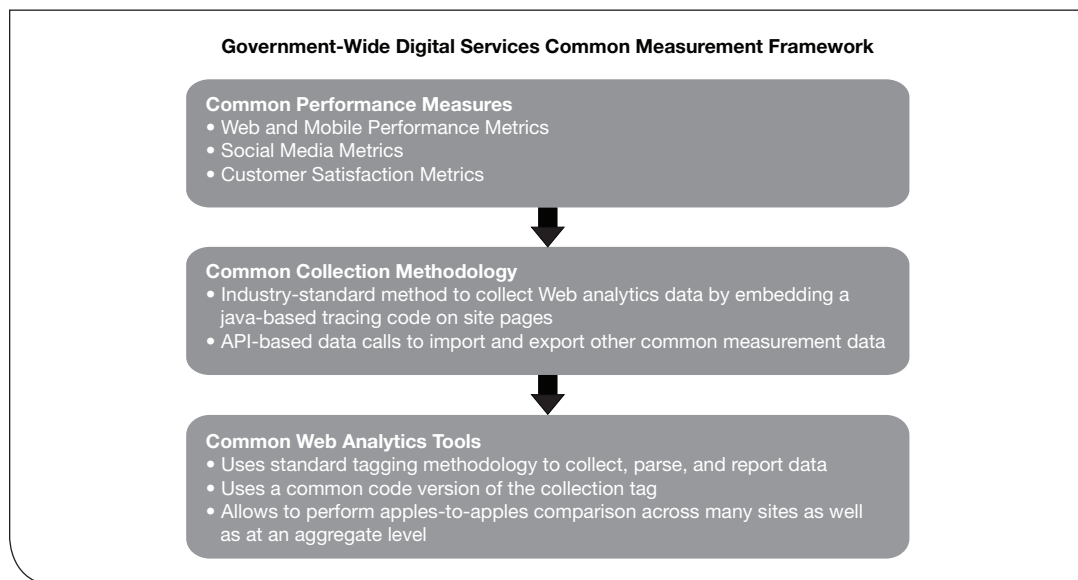
Raise awareness → Build knowledge → Increase support

Understanding Social Media Measurement

This report's goal is to highlight current best practices in social media measurement, as well as the reporting and interpretation of social media data. Similar to previous waves of e-government implementation projects, social media measurement practices are evolving with the use and increasing adoption of social media. However, measuring and changing online tactics is dependent on organizational context, and existing internal strategies and policies and practices vary across the federal government. One social media director interviewed for this report says, "The metrics part is a very important topic that many of us are still grappling with." Measurement practices are still evolving and regulations are adapted accordingly, as the *Guidance for Online Use of Web Measurement and Customization Technologies* issued by the Office of Management and Budget (OMB) reflects (The White House, 2010b).

Current social media tactics in government can primarily be described as broadcasting of already existing web content to inform and educate the public. At the same time, the White House's *Digital Government Strategy* focuses on higher-level engagement such as improvements in customer service; innovative networking tactics to directly respond to citizens and provide one-on-one services are rare (The White House, 2012). As a result, it is not surprising that agencies either have little need to measure or few sophisticated measurement practices. One social media director has described his agency's analytical strategy as: "I would say we are measuring the 'return on ignorance.'" He states that some of the existing regulations or the perception of restrictions hinder creative analysis of user data, and therefore many agencies

Figure 5: Digital Analytics Program to Match the Digital Government Strategy (GSA)



Source: <http://www.howto.gov/web-content/digital-metrics/digital-analytics-program>

Suggestions for Social Media Measurement

- **Measure your social media strategy's goals:** Before you look at the metrics, make sure that you are measuring what you set out to do. Measures need to be tied directly to performance indicators or actual tasks for actionable insights.
- **Understand which type of social media content leads to desired outcomes:** Use quantitative measures, such as number of comments on posts that result in meaningful discussions.
- **Listen to conversations without being actively involved in the conversation:** Do not always be actively involved, but make an effort to hear which topics are being discussed, so that when hot topics bubble up it won't be a surprise. Intervene when necessary—for example, when rumors are spreading false information.
- **Analyze your audiences' preferred habits on social networking sites:** Part of a successful social media presence is the understanding of the blogosphere and Twittersphere. How do citizens interact with your content on Twitter? Take the time to observe, learn, and apply best practices.
- **Gain a better understanding of the composition of your follower network:** Identify knowledge hubs and important followers to understand how to engage and activate those influential, networked individuals as knowledge replicators. Thereby, actively understand how the content is spreading through the social graph of your network.
- **Combine offline and online metrics:** Social media content can jump across different media channels. Pay attention to endorsements of your social media activities by traditional media.
- **Trace social media outcomes:** How do social media affect the public's behavior? Show by using traditional surveys or pop-up questionnaires on your website whether citizens' trust in a government agency increases through higher levels of online engagement. Have their attitudes toward your agency changed, or did they change their behavior as a consequence of social media exposure?
- **Allow for multiple (social) media channels and the distribution of real-time information:** Learn to understand each channel, instead of applying the same principles to all channels. Responsiveness and impact in a real-time information-sharing environment might be challenging, but as soon as you start, citizens will expect this in future interactions with your agency.
- **Don't ignore the knowledge citizens are willing to provide through social media channels:** Citizens can be used as authors and are potentially creating new knowledge for an agency that has otherwise bought from consultants or vendors.

are reluctant to actively measure their social media interactions beyond the number of comments on Facebook or the number of retweets their own content receives as an indicator for engagement.

The *Digital Government Strategy* reflects the need to apply social metrics in the government-wide digital services measurement framework as part of an agency's Common Performance Measures (The White House, 2012).

Public managers therefore need to develop techniques to analyze conversation data, identify emerging issues, enable advocates and thought leaders among their audience members, and ultimately use social media as an ongoing governance mechanism beyond time-bound initiatives and campaigns.

Traditional measurement techniques include, for example, Meletski's four-step model to evaluate the degree to which an agency's website is static, interactive, transactional, or transformative

(Melitski, 2003). Others measure performance of e-government activities based on input, outcome, intermediate, end or ultimate outcome measures (Stowers, 2004). While the measurement of these dimensions is helpful for outside evaluators, the existing e-government metrics mostly focus on counting the number of interactive elements on an agency's website and therefore provide little insight on how helpful government online interactions are.

This report can guide managers in understanding how to better align their social media tactics with their organizational mission by creating a social media strategy. Given that actively using social media to increase customer service, participation, transparency, and collaboration with the public is part of a presidential mandate, each agency has to make sense of how social media tools can help them support their own mission. The measurement framework presented in this report can be used by public managers to improve their decision-making on:

- How to allocate resources
- How to potentially build additional organizational capacity
- How to change organizational routines and processes to align their agency's social media use with the mission

The report's overall goal is to help managers understand how to collect, analyze, and interpret social media analytics and use measurement insights as a form of participatory feedback to adjust their online practices.

Designing a Metrics-Based Social Media Strategy

A series of changes supports many efforts to use social media to promote the Open Government Initiative:

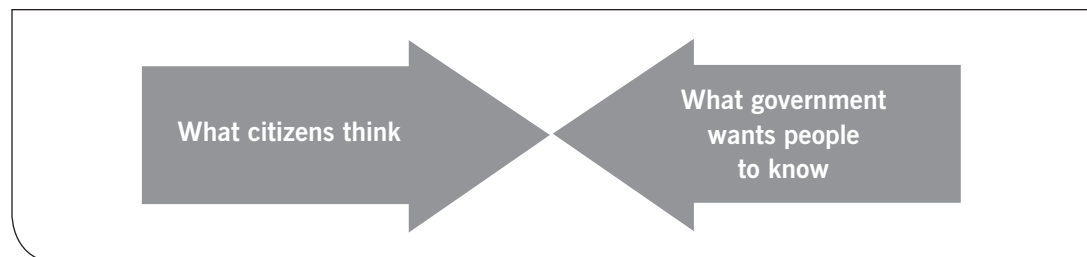
- Terms of service agreements with social network service providers prepared by the U.S. General Services Administration (Aitoro, 2009; GSA, 2010)
- The National Archives and Records Administration's social media recordkeeping guidelines (Franks, 2010; The White House, 2010c)
- The Library of Congress' decision to archive all tweets (Library of Congress, 2010)
- Changes in the cookie policy that allow government agencies to collect user data (Orszag, 2010)

"An open government, a government that communicates with its constituents, is going to be a more effective government. I think our government recognizes that and this is how people communicate now. If we want to communicate with people, this is where we have to be."

— Agency Social Media Director

Overall, social media can be used to decrease the communication gap between the citizen's perception of government operations and the actual work government performs:

Figure 6: Closing the Gap between Citizen Perceptions and Government Intentions



However, before any measurement efforts can be developed and implemented, it is paramount that a government agency derive its social media strategy directly from its mission statement. There is no measurement without knowing what to measure and to what end metrics are applied.

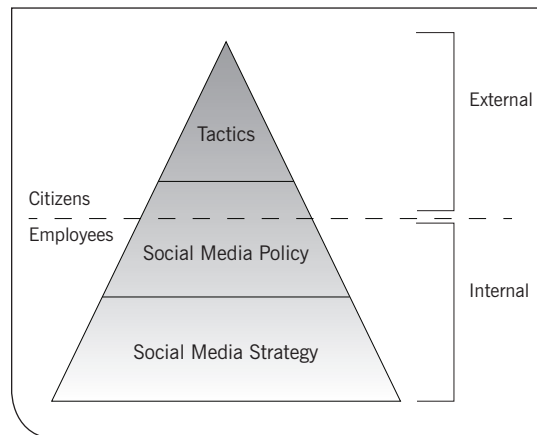
Design Phases

Social media—like every information and communication technology adopted in the public sector—need to support the mission of the organization. It is therefore important that government organizations pay close attention to their online interactions and how they support the organization's strategic goals. A first key action is to design a social media strategy that supports the organization's mission. Mission support is often reported by social media directors to be part of technology policies or other political mandates that push technology innovations forward.

However, social media innovations are often driven by social interactions and changes in online behavior among citizens, instead of reinforcement mechanisms such as political mandates. One social media director tells us, “We do it because that’s where our constituents are.”

It is necessary to create a strategic vision of social media’s implementation in the form of a social media strategy that focuses on mission and fits into the existing e-government processes and communication strategy. Social media policies then regulate both employee and citizen behavior when they are interacting online with government. As a result, social media policies have both an internal as well as external component and include, for example, directions in the form of comment policies. Finally, online tactics (such as push, pull, transactions and networking) are observable for the public on social media channels (Mergel, 2010), as seen in Figure 7.

Figure 7: Social Media Strategy -> Social Media Policy -> Social Media Tactics



A government social media strategy should start by gaining clarity about organizational mission—which is different for each agency, initiative, team, or time-bound campaign. This in turn has implications for organizational capacity in form of human capital—who should be involved in social media activities and what roles and responsibilities need to be assigned (for content curation, information vetting, posting, responding, etc.).

The mission influences what the expected outcomes are. Does the mission only require active informing and educating of the public, or higher levels of interactions in the form of active customer and citizen services or community engagement? Some agencies might want to use social media to increase public awareness of program availability or of policies and their potential impact. Others might want to actively establish and improve the relationship with their stakeholders or influence specific actions and online behavior of citizens, such as finding support for budget cuts, or other unpopular policies and decisions.

As a result, online tactics vary from simply putting out information through social media as additional channels in the communication toolbox to highly interactive social media applications asking the public to provide input and comments.

Even before any assumption about the selection of online channels can be made, it is important to understand who the target audiences are. For some offices, this might include all citizens, while other agencies may run campaigns targeted to specific audiences.

These online audiences select specific tools as their preferred online destinations, so that the tool selection should be one of the last decisions in the social media strategy design process.

Finally, none of the activities are helpful without constant reflection on how they worked, why they worked, and potentially even how citizen perceptions have changed.

Internal adjustments of the tactics and reflections about social media practices then create a participative feedback loop, which helps the agency to respond to emergent changes in the online preferences of citizens.

The following figure summarizes the design process of a government social media strategy:

Figure 8: Measurement as Part of the Overall Social Media Strategy

Why?	Who?	What?	How?	For whom?	Where?	Did it work?
Organizational Mission	Responsibilities Roles	Representing Customer Service Community Engagement	Push Pull Networking Transactions	All Citizens Specific Clients Professional Organizations Selected Geographic Regions	Facebook Twitter Instagram Blog Wikis Podcasts Foursquare Pinterest Storify, etc.	Quantitative and Qualitative Measures and Metrics

Goals of Social Media Use

Like other e-government projects, social media use follows different implementation phases or pathways that depend on their purpose and mission support. Organizations often move from simple applications of a new tool to more complex interactions. E-government maturity has increased during the last 20 years from simple presentation of information on a website to simple interactions in the form of contact forms or e-mail exchanges to actual transactions. Rarely do e-government activities lead to actual transformation. Social media use in the U.S. federal government can be divided into three different stages that are reflected in distinguishable online interactions (Mergel and Bretschneider, 2013):

- Representation
- Engagement and attention creation
- Networking

Representation

Most of the social media interactions to date have focused on educating and informing followers about information that is also available on the department's website—a simple representation tactic.

News presentation is one of the main tactics observable online. The simple presentation of regular publications is often enough to increase perceptions of transparency by providing materials that can, in turn, increase agency accountability—similar to the voluntary provision of online materials on a department's website. As one social media director states: "Get the message out to the audiences that might not normally hear it and [usually have a] lower engagement with government." Even though the representative tactic is often seen as the bare minimum of social media interactions, it helps citizens by sharing, broadcasting and distributing important government information that they might not actively seek out.

Engagement and Attention Creation

Citizens have been calling for more interactive social media use by government agencies. Some agencies recognize the need for online customer service. Constraints of the existing bureaucratic rules and policies oftentimes prevent immediate responses and answers—and especially in this very public online medium, interactions have to be carefully weighed.

Agencies often take a back seat, presenting their materials online at regular intervals, but otherwise remaining relatively passive. They use social media to listen to and absorb comments, not to actively seek out interactions. As one social media director puts it:

We wanted to engage. But, when we started a year ago, a lot of things were just “push.” We recognize that we should be engaging more.

Listening to the audience has clear advantages that are relatively difficult to measure or quantify, because they might not directly lead to changes in organizational performance and effectiveness: “Given the opportunity, people are really excited and willing to provide fantastic insight in things that help us get closer to the taxpayer and to the people that we serve by listening.”

Other agencies solicit feedback in a more proactive manner and have recognized that online campaigns can raise awareness of public policies, but also help the agencies themselves understand the impact of policies. One social media director says: “One side of the communication strategy that we did was a little mini campaign called Share Your Stories [...] from there we put together our blog posts [...] pushing them out onto different subnets.”

While it might seem to be of little direct policy relevance, NASA received a lot of attention and public awareness with the help of the tweeting Mars Rover, crossing over to other more popular channels, such as newspapers and even *Vanity Fair*. High levels of engagement have the potential of engaging future participation efforts in policy making processes.

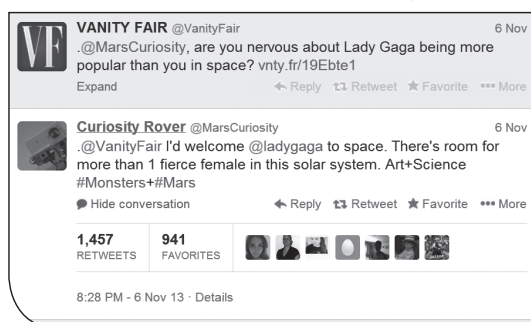
The *Vanity Fair* and Mars Rover interactions received a lot of attention, but are outliers among government social media interactions. Most agencies cannot generate the attention reflected in the number of retweets and favorites that the Rover-*Vanity* Twitter exchange received. The social media numbers are usually much lower, as this statement by one social media director reflects:

In the grand scheme of things [the numbers are] not that big. But the idea is to show that we are out there engaging people in that way, because it is increasingly where people are looking to get their information. We are being more open and engaged in that way. At the end of the day it does give us a pull. You can get so closed off in government, so immersed in what you are doing that you never really get the outside perspective. Having social media gives us real-time feedback on what people are thinking and how people are reacting to what they are doing. So it may not be a huge [number]. It only takes one person to give us a good idea, or to give us a piece of criticism [and you] go: ‘Wow, that person is right. We should actually be talking about this.’

In turn, the return on investment (ROI) can then be articulated as a way to determine how responsive government is and how citizens perceive government’s interactions with the public. One social media director says:

The return on investment is feeling as though government is accessible. I can turn to government if I have a question. I can turn to government ... and get a response. I think that is kind of the return for folks. That’s a feeling. Because if people feel like government is responsive to them and can do big things, can answer their questions, then they’re more inclined to trust us when we want to do something a bit harder. If we can create a more responsive government, we can use these tools effectively in a way to kind of up people’s trust in government a little more. We’ll not only give them a better government, but we’ll give them a government that can do more things to help them live their lives a little bit better.

Figure 9: NASA's Mars Rover as Part of Pop Culture



Networking

Finally, being part of a community and a larger network of online users who are all interested in policies, news coverage, or certain policy outcomes creates value for agencies on social media. Relationship and community building activities as a result of online interactions on social media are important to gain insights into the “various communities we serve”—as stated by one social media director.

About 50% of the interviewed social media directors recognize that they do not have to play an active role when using social media applications. Instead, a passive strategy to listen and absorb comments provides them with very valuable insights from their audience. While several social media directors mention this objective, no interviewees point to examples; instead, they list reciprocated feedback and interaction as a desirable goal for their future social media use.

Networking can help agencies understand the impact of new policies on citizens and the perceptions circulating about the policies, and agencies can then move relevant information into the online network to either:

- Defuse rumors
- Respond to concerns
- Provide real-time information
- Support social media users who are impacted by a policy

Other agencies recognize that their online activities can help them assess and potentially improve the relationship over time.

Finally, any social media strategy pursued by government must address the need for privacy protections as part of social media outreach. While social media provide agencies with powerful tools to engage citizens, and is used widely in the commercial sector for marketing and other initiatives, it needs to be used appropriately, and consistent with legal and policy requirements when used by government. Appropriate safeguards and procedures can ensure the public that social media analyses are used in a way that protects the privacy of individuals.

In summary, the online interactions described above are designed to gain and increase the attention of otherwise disconnected audiences. As a result of frequent updates, potentially even interactions between stakeholders and government organizations, online audiences might change their perceptions of an agency or a policy and, in the best-case scenario, even change their offline behavior. This behavior change is illustrated in the following Figure 10. It can mean that citizens are better prepared for emergencies, show up to vote, sign up for campaigns, apply for health care, or are simply aware of policies and programs.

Figure 10: Social Media Use to Change Citizen Behavior



Aligning Metrics with Social Media Goals

Helping top management understand the value of investments in social media interactions is one of the biggest challenges social media directors face when they are making their business case. Social media's impact may depend on anecdotal evidence (e.g., one-hit wonders on Instagram, most-commented-on post on Facebook).

Top managers are frequently used to dealing with hard facts and clear impact measures in the form of cost savings or number of citizens served. In the case of social media, it is much more important to provide evidence that shows:

- How citizens have changed their behavior as a result of their social media interactions with an agency
- How they changed their perceptions about government responsiveness
- How social media helped avoid the spread of rumors
- How citizens have been encouraged to vote
- How citizens have been influenced to prepare for an emergency
- How citizens have moved away from traditional channels to informal, resilient, and trusted online communication infrastructures

Social media's value proposition therefore needs to be communicated in the context of mission support, but also needs to take different communication modes and goals into account.

Understanding Different Social Media Communication Modes

Online interactions between the public and government social media accounts should be analyzed and interpreted with the understanding that:

- Each government organization has a different mission and cannot be compared to another. As an example, one of the highest ranked social media accounts has always been the White House's. Every update receives several hundreds of shares and likes. However, elected officials in office or up for reelection have a different mission than other government organizations. They put out a higher volume of updates to attract maximum media attention and, in return, interaction with their content.
- Online updates follow different social media tactics. These are either initiated based on internal strategic planning outcomes or driven by external events.

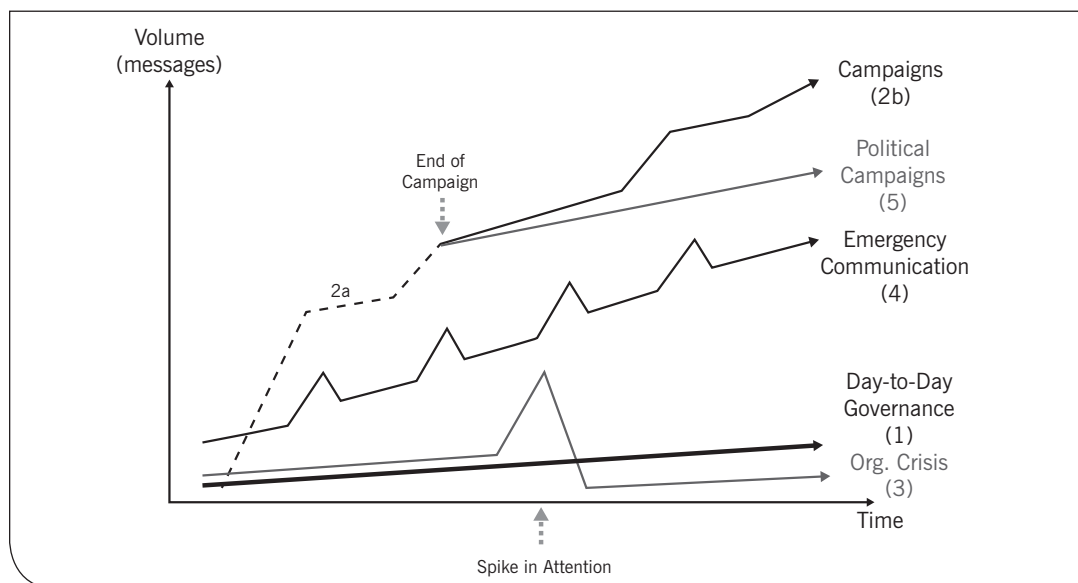
The general communication paradigm in the public sector is low volume, need-based, and can consequently be reactive. As Jed Sundwall of Measured Voice said in a recent DigitalGov University webinar, "Government organizations are used to communicating in a steady and trusted voice with the goal of providing reliable updates."

Social media gives agencies opportunities to communicate beyond the press release style and create peaks in public awareness and attention with the help of targeted campaigns. Formal metrics therefore depend on different modes of online interactions. According to one social media director:

Depending on the specific projects, one of the helpful [things] to look at is [a] breakdown of the project into smaller projects. We have specific outreach mechanisms for different types of events.

As the following graphic shows, there are a wide variety of communication modes social media managers can make use of beyond the steady and trusted infrequent updates (1). They can run campaigns (2a and 2b), communicate when necessary to defuse rumors in organizational crisis situations (3) or when they need the attention of citizens during emergency situations (4). However, it is important to distinguish political campaigns from regular government communications:

Figure 11: Social Media Modes



Measuring Social Media Interactions

As part of e-government measures, many agencies administer customer satisfaction surveys. These can be quick pop-up inquiries on an agency's website. They are, however, subject to restrictions and have to receive clearance from OMB before they can be sent out to citizens or other audience members (Orszag, 2010).

Government communication is sometimes compared to presidential campaigns. One social media director tells us:

[In a political campaign], it's all about ROI [return on investment], it's all about what are you doing each given day to win votes or raise money, or all these things. There are very clear goals. It's honestly one of the things I struggle with: What's my goal every day? What am I trying to do? There is often no clear metric. One ... great measure of success is conducting surveys and getting a good measure of response rate when asking "Were you able to do the thing that you wanted to do today on the Web? Were you able to find what you needed to find?"

Measurement techniques are an ever-evolving practice as social and technological changes occur. Many agencies are reluctant to measure their online interactions, or are even prevented by their interpretation of existing laws and regulations. An important step in using the appropriate metrics therefore includes a deeper understanding of the social and behavioral challenges associated with the interpretation of social media data by public managers, as well as social media professionals in government:

We don't track any data. Facebook tracks the data. We have access to some demographic data, how old users are, where they live (as in cities). I'm tracking number and trends among Cabinet-level agencies. I'm watching the growth of all the Cabinet-level agencies, trends, and how fast their growth rates are.

One remarkable example on how to measure social media interactions is the Centers for Disease Control and Prevention eHealth Metrics Dashboard, which provides detailed engagement numbers.

The following part of the report provides insights into five different approaches to measure social media interactions:

- Breadth
- Depth
- Loyalty
- Deriving sentiments from qualitative data
- Combining offline and online interactions

Measure 1: Breadth

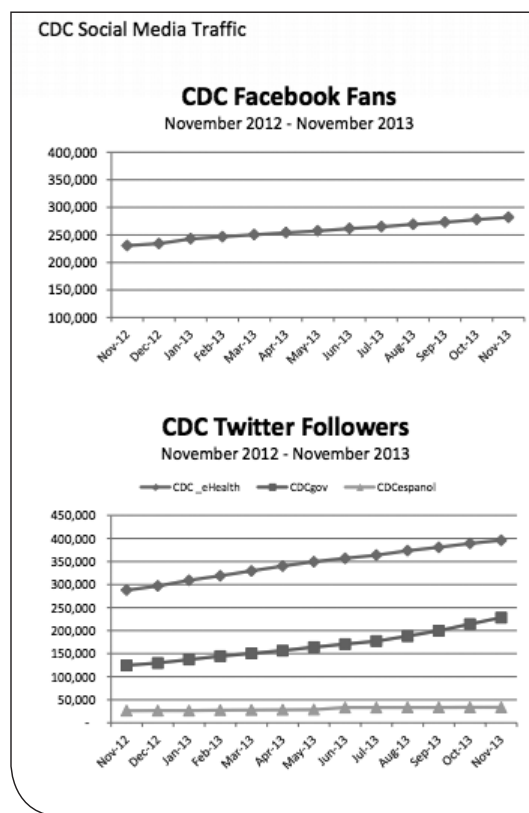
It is especially important for a government agency to understand who they are reaching, and if they are reaching the right audience. This is traditionally accomplished with citizen satisfaction surveys on government websites that provide insights into how loyal citizens are or if they are “frequent fliers”—coming back to an organization’s website often to access information. It will help an agency understand areas of interest but also whether their audience mostly consists of professionals, professional organizations, or the general public.

Insights from returning visitors can be a trusted resource for additional feedback. Combining online service with social media insights provides an even more detailed picture of the audience’s need. However, as one social media director points out:

We don't know [who we are reaching]. As government, we are not supposed to drill down too deep into who is using [social media]. Gender split, country, or region are important, but we look more at engagement and level of attention.

Another social media director highlights the fact that his agency breaks down how the audience members search for government information. He tells us:

Figure 12: CDC eMetrics Reports



Source: <http://www.cdc.gov/metrics/>

We look at where they come from, if it's a Google search or it's from [the organization's] homepage or from the [campaign] page. Seeing where people come from helps us more accurately create targeted messages.

Others are interested in specific audiences:

We keep track of followers in the private sector as these innovations keep happening (e.g., new policies, plans). We will break them up and we really target specific audiences. It makes it easier to gauge how successful [a campaign] was, the number of replies, whatever the objective of that one project is. Maybe it's that this week we have a goal of growing our Twitter account by 3% or 10% or whatever our goal is and we will set out specifically to do that, find effective ways to actually try and exceed those goals, get these people involved. That's been the most successful way that we've found ... [We] just communicate and see the project [move] along. And then we will see the large impact, too, as your Twitter account grows, the next thing you know you have 150,000 followers. You will see the larger impact as well.

In a recent GSA social media metrics webinar, Jessica Orquina (EPA), provided insights into how the Environment Protection Agency (EPA) is measuring the breadth of its social media interactions. Orquina defines breadth as a high-level metric that she reports to her superiors to understand who the audience is, how many people have connected with the EPA, and how many people have indicated that they want information from the EPA. She looks at the community size and measures growth over time to understand trends. Beyond the direct measurement of size (volume), Orquina also points out that these numbers can serve as an indicator of the potential (or indirect) audience size, when the direct followers are willing to share an agency's update with their own followers or contacts.

Similarly to the EPA, the CDC publicly provides the following numbers for each of its online channels to show community size.

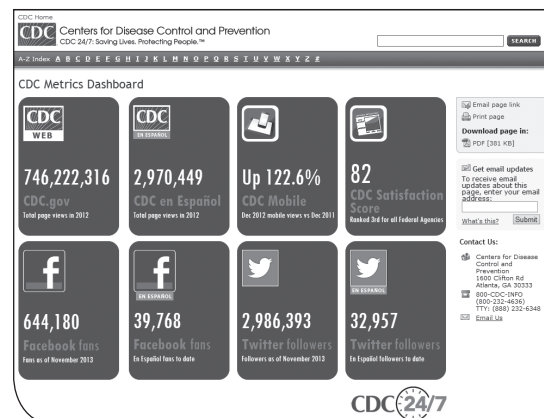
Measures of community growth are helpful in understanding trends: whether there is increased interest over time, who finds the information put out by an agency helpful, and if an agency reaches its goals or is able to support the mission.

Measure 2: Depth

It is difficult to go beyond surface measures such as breadth and to dive deeper into available data. How is information from an agency used and what are the perceptions of readers or the press? Tracing online conversations and responses to social media updates is one indicator. Citizens are often responding to a government in a more active manner than simply seeing, favoring/liking, or forwarding it to their own network. They start an online discussion reusing the content provided by an agency or adding their own information to the content. This kind of direct engagement or responsiveness to social media updates is relatively easy to trace and directly observable.

Agencies should encourage citizens to cross-promote an agency's content on both Twitter and Facebook (for example, Twitter chats around events leading up to Earth Day) or pull citizens in

Figure 13: CDC.gov Metrics



Source: <http://www.cdc.gov/metrics/>

for additional engagement opportunities, such as the following White House tweet in which citizens were encouraged to use a YouTube video and share it through their own social media channels. The high number of retweets (of +1,681) shows that followers took this request seriously and shared the tweet with their own followers. Twitter is also experimenting with depth measures; for example, showing external pages on which an agency's tweet is embedded as seen in the following figure:

Measure 3: Loyalty

Loyalty—how often citizens are willing to return to an agency's social media or web content—is an important indicator of the inherent worth of content to users, even at times when they might not agree with unpopular policies. The returning community can be tracked and their insights are important to support strategic outcomes. As one social media director says:

A good amount of feedback comes from our most loyal audiences. They will give you feedback on things that they want to see, changes to databases, etc. We get feedback in terms of what people are coming to the site looking for. We then create a box on the homepage with updated information.

These are also the audience members whose sentiments count, because they are an important indicator of how well the agency is doing in its outreach activities. Instruments such as surveys are helpful to capture sentiment and gain direct feedback about online experiences during social media campaigns.

Measure 4: Sentiments through Qualitative Insights

Social media use and the engagement of citizens with an agency's social media content can be reflected in the form of a ladder of engagement. The more time citizens are willing to spend on an agency's social media channels, the higher the engagement rate is. This type of engagement can be interpreted as vibrancy or relevance or in terms of degrees of "socialness" of the content. For example, the more people are clicking on links and spend time on an agency's website, the more relevant the information is.

"Socialness" of online content can also include indirect engagement: citizens are engaging with the content or even with each other and are not even directly engaging with the agency itself. These forms of interactions with the content can occur in the form of comments left in response to an agency's blog post, citizens reusing tweets in their own blogs or tweets, or

Figure 14: Engagement beyond Retweets and Favorites



Source: <https://twitter.com/whitehouse/status/348519235472998400>. For more information, see Twitter blog update: <https://blog.twitter.com/2012/innovate-through-experimentation>

"I disagree with people who say they're useless numbers. I think if nothing else, they tell you there's significant interest in what you're doing in this space, whether this space is Twitter or Facebook."

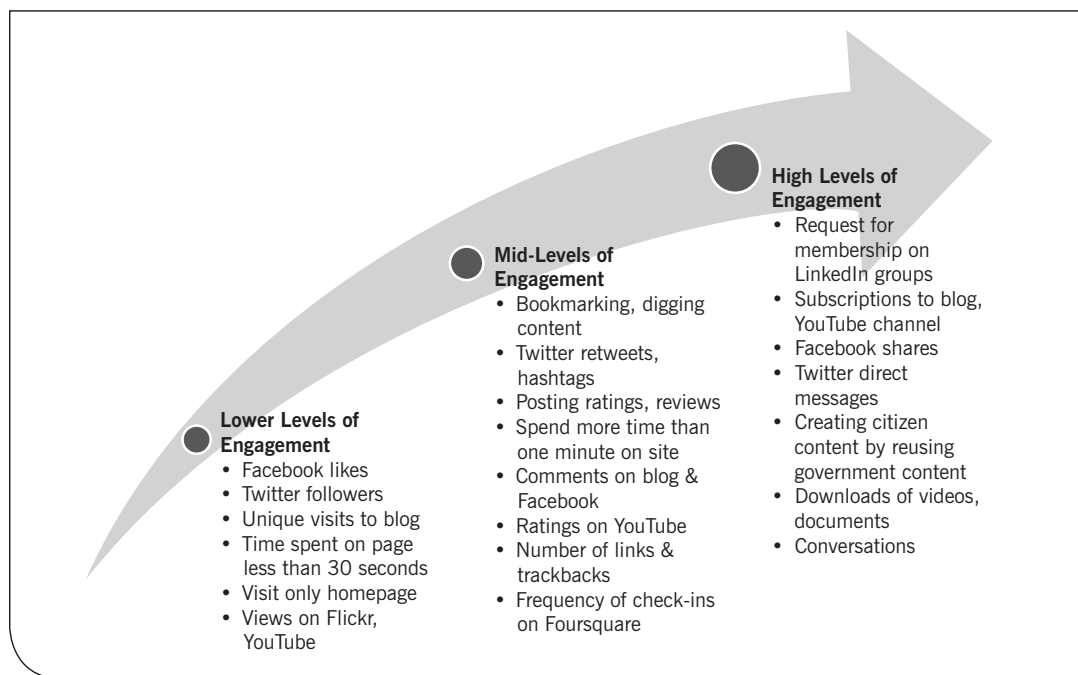
— Agency Social Media Director

even longer blog posts on their own blogs. Social media directors value the insights from these types of interactions. One social media director says:

For the most part, people who choose to engage do so because they like us, with the exception of those who organize [against an issue]. We can create a platform for conversations to occur and I think people might value that platform.

The ladder of engagement provides insights from lower level engagements to high-level engagement that are each measurable in form of quantitative numbers, but do need to be interpreted in different ways:

Figure 15: Ladder of Engagement



Many social media directors trace the quantitative numbers indicating engagement, or at least interest in, an agency's content. Another social media director says:

As for Twitter, we do watch retweets and when people mention us on Follow Fridays (#ff) and all those different things. That really shows that some messages move better in different channels than others.

Numbers are an important sign that citizens are paying attention, which might be bad if it is directly related to negative press coverage and in turn, does not support the mission of the organization. Other quantitative numbers, such as the numbers of followers or the number of likes a Facebook post receives, indicate attention, but do not necessarily result in actions, intended social change, or changes in behavior.

“The metrics we are using now are sufficient for our appetite for them right now, or our capacity to consume them.”

— Agency Social Media Director

GSA's contractor Measured Voice ranks the number of retweets an agency receives daily. These updates give insights into what citizens share. The highest ranked updates include unique pictures.

In addition to noting these quantitative numbers, it is also important to think about the expected results of online interactions. To understand which channels are worth focusing on, government communicators have to understand on which social media channels their target audiences prefer to receive and interact with government information, and how they are sharing the information. Numbers are important to see upward trends, but an interpretation of the data is necessary to be able to change tactics.

Focusing merely on easily accessible quantitative insights, such as follower numbers or the number of times citizens have shared social media content, is often not enough: We were told by one social media director:

You still need a human being to evaluate that feedback and see if it is really constructive. Some of it could just be a nice “Thanks!” or it can be some off-topic comment that doesn’t really get the point across, so we are mixing measurements and using the standard web hits, followers, fan, etc. and using the anecdotal evidence we have to show a real impact.

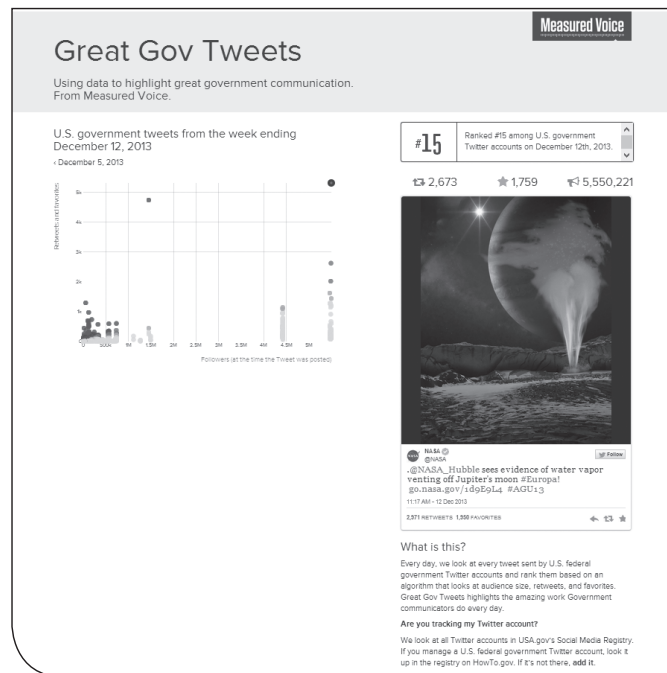
Anecdotal evidence from USDA’s Food Safety Twitter account relates to the following statement from a social media director:

Tweet out a food recall and someone says “Wow, I just saw this tweet and threw away this product that made me sick.” That is success, because we are reaching somebody that might not have seen the warning otherwise.

This is an example of social media interaction having possibly saved a life. The combination of quantitative data and the human aspect is always needed in interpreting numbers in conjunction with individual feedback. Another social media director says:

We keep our ears open and really listen to what people are saying as to the value of our channels. That’s what measures success for me. Of course, you know management likes data, and so we give them the number of followers and how many hits and these types of things. But it has the most impact when you can tell [top management] that somebody threw away a food item that could have injured that person or their family.

Figure 16: Great Gov Tweets December 2013



Source: <http://shiningsea.measuredvoice.com/weekly/>.

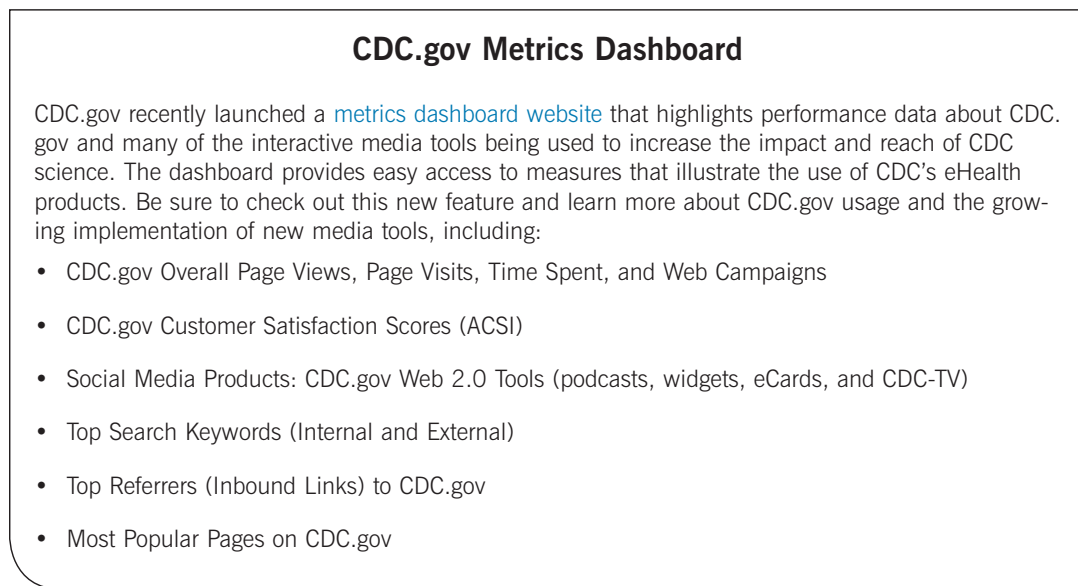
Measure 5: Combining Offline and Online Data

While every agency has different practices on how to create social media reports, one common theme is that pure social media data is not enough. A variety of offline and online sources of data including hardcopy, online data, or notifications through RSS feeds can be combined to create a meaningful report and act on the findings:

- **Tangible results:** Include objective, easy to quantify social media data, but outcomes that can be easy to assign money or time values to. The most common measures credible with top management are usually combinations of web analytics and combined click-throughs that indicate if citizens are pulled into the agency's website by clicking on social media content. As one social media director notes, "Real-time web analytics programs, that not only measure activity on the website, but also measure things like click-throughs from the social media sites and their participation as well."
- **Intangible results:** Include data that cannot only be derived from social media numbers, such as the change or shift in citizen behavior, changes in their attitudes toward government in general, an agency's (unpopular) policy that might ultimately indicate learning. However, these measures are extremely difficult to measure or assign a monetary value to, and are can therefore be less credible with top managers.

The CDC has integrated social media metrics with other forms of impact measurement, as seen in Figure 17.

Figure 17: CDC.gov Metrics Dashboard



Source: <http://www.cdc.gov/socialmedia/data/index.html>

Making a Business Case with Numbers

Interpreting Measures and Acting on the Insights

An important part of the social media measurement plan is data interpretation. The interpretation leads to innovations in online behavior. One agency shares how it acted on citizen requests received via social media by adding additional information on the agency's homepage. A social media director reports:

Consumer issues are becoming more and more important for us ... one of the things we created was something for our homepage: consumer resources, a block that has rotating messages, so that people can see the latest consumer information. [This] box on our homepage, that's actually one of the primary spots on the homepage with updated [agency information].

An important selling point to agency leadership is to show how citizens prefer to receive their information from government and this is more and more on social media channels. Another social media director says:

We can show leadership the sorts of conversations that are already happening out there about us. We can show them just from monitoring things on Twitter or Facebook, or whatever it might be, *what* people are talking about and *how*. How they are seeing the agency, or how they are seeing the entire department as a whole when it comes to whatever it might be is happening at the time. So you can show that information. We can show that raw feedback and that raw sentiment, so to speak. We can say, this is what people are talking about now, this is social media, this is the water cooler of the millennium. Few are not engaged in this conversation, in all of these conversations, in some way, then people are just going to form their own opinions, whether they be true or not. We have an opportunity to be involved in the discussion and provide some input into what is being said.

Fulfilling the Open Government Initiative's Mission using Social Media

In the following part of the report, the goal measurement practices of the Open Government initiative (OGI) are presented and initial hints at potential interpretations of social media use to support the OGI mandate are provided (The White House, 2009).

The insights provided from social media directors in interviews for this report show that government is currently focusing mostly on push techniques and uses social media channels to provide information recycled from other government communication channels, such as publications, reports, or the website itself. Measures therefore include mostly raw data, such as

number of followers, page views, etc. The outcome is similar to static website interactions and is mostly focused on educational or informational purposes (reflecting what Moon found in his 2002 study on the evolution of e-government services). This one-directional way of viewing and reviewing social media interactions leaves out many of the possibilities social media applications provide for government.

Measuring the extent to which government is engaging unlikely audiences will help gain access to innovative knowledge to potentially solve government problems. Asking citizens to submit their ideas or provide media content, such as videos or photos, highlights the potential for bi-directional citizen participation: Citizens' content is actively pulled in through new forms of crowdsourcing and can be reused in government.

The following figure summarizes the national priorities of the open government initiative and provides insights for the increases of transparency, participation, and collaboration derived from social media data.

Figure 18: Measuring Open Government Outcomes Using Social Media Data

Mission	Goal	Tactics	Social Media Measurement	Outcome
Transparency	Information Education	One-way push	<ul style="list-style-type: none"> • Number of followers and likes/friends (change from start) • FB likes • Twitter followers • Unique visits to blog • Time spend on page < 30 seconds • Visits only homepage • Views on YouTube and Flickr • "Read more" 	Accountability Trust
Participation	Engagement	Two-way pull	<ul style="list-style-type: none"> • Click-throughs from social media sites • Reach: Demographic data (gender, location, cities) • Bookmarking and digging content • Twitter retweets, hashtags • Posting ratings and reviews • Spend more than one minute on site • Comments on blog and Facebook • Ratings on YouTube • Number of links and trackbacks • Frequency of check-ins on Foursquare 	Consultation Deliberation Satisfaction
Collaboration	Cross-boundary action Two-way interactive	Networking Co-design of services	<ul style="list-style-type: none"> • Request for membership in a LinkedIn group • Subscriptions to blog, YouTube channel • Facebook shares • Twitter direct messages • Creating their own content • Downloads of videos, documents • Conversations • Volunteering, donations • Offline actions 	Community building Creation of issue networks

Transparency

The main goal of social media use is agency representation on all available online channels. The following quote from an agency social media director shows the importance of social media channels:

Why we're on Facebook or Twitter: to be where the people are. So [with one billion] users now on Facebook, for example, you want to be there. When people search for ... stuff on Facebook, they find us.

To understand if citizens actually find the information on social media channels, the majority of interviewees note that an important indicator is the number of followers and viewers of content. One social media director says:

We look at the raw numbers: how many followers did you have when you launched the page, and how many followers you have now. [...] Facebook has grown from 0 to 313 in the last three to four months since we have really launched it. It's good—it's not fantastic, it's a limited audience. Plus we have not really publicized this. The only way we publicize this is on our homepage. The rest is all through word of mouth.

The representation objective is clearly to be as inclusive as possible and reach audiences in the social spaces they frequent daily. Several interviewees recognize the need to reach audiences that do not routinely interact with federal agencies and are therefore excluded from government information. They see the use of additional channels on social networking sites as a way to institutionalize their interactions and bring government information to citizens.

Social media channels provide some high-level insights into audiences as one social media director points out:

We look at engagements and level of attention. For example, on blogs—which are the most popular blogs, how long are people spending on each one? Are they just flipping through, looking at the pictures? Are they spending some time reading? Do they visit multiple blogs when they come, or do they just hit one and then go away? [...] Also, where they come from: Is it a Google search, or is it from our [department] page, or from the First Lady's Let's Move initiative [as a lead partner]. So seeing that people are coming to us from there helps us more accurately target messages.

Participation

The second most frequently mentioned objective for maintaining social media accounts is citizen engagement. Some practices indicate that content produced for the core website is duplicated and pushed through social media channels. As an example, social media channels are used to pull citizens in to answer online surveys about the content provided. Another social media director states:

We do a survey and ask a lot of Yes/No questions, one to 10, and allow open-ended responses for this. And we do get a good amount of feedback from our most loyal audiences [...] in terms of what people are coming to the site looking for.

These customer satisfaction surveys, which can be quick popup inquiries on an agency's website, are subject to restrictions and have to receive clearance from the OMB before they can be sent out to citizens or other audience members (The White House, 2010a).

Interactions focus mostly on lower levels of engagement and participation. Beyond providing information to the public, agencies actively seek feedback from citizens through their social media channels. The feedback is then used to increase the quality of the final policy, decision, or document, as one social media director asserts:

“Are they just flipping through, looking at pictures? Are they spending some time reading? Do they visit multiple blogs when they come, or do they just hit one and then go away?”

— Agency Social Media Director

We are asking the public specific questions on various topics that are addressed within the planning role [during the draft period of a rule] to get their feedback before we draft it [...], so hopefully we will get closer to what is an acceptable and really desirable rule.

In addition, it is oftentimes helpful to see if the audience members are actually using or reusing the information.

True impact evolves as agencies find more ways to directly engage citizens in the policy cycle via social media. A social media director recalls:

In the past it has taken a long time for policy implementation: to draft the rule, go through the Federal Register comment process, make changes, and then make final edits. It has often been challenged in courts of law. So this time, what we are doing is opening the black box and kind of changing the order of engagements: We are asking the public specific questions on various topics that are addressed within the planning role to get their feedback before we draft [the rule]. We see that, given the opportunity, people are really excited and willing to provide fantastic insights into things that help us get closer to the taxpayer and to the people that we serve by listening.

Collaboration

Collaboration between government and citizens indicates a higher level of engagement in a reciprocal relationship by allowing audiences to directly engage with government content and co-create government innovations. However, government agencies in this sample are very clear that they do not desire to create a direct, reciprocated relationship with citizens by following citizens back and having creative conversations online, and as discussed in the section on social media (page 17), it is important to address privacy protections as part of a collaboration strategy as well. Collaborative engagement is therefore only identifiable in the active interactions of citizens with government-provided content. A social media director says:

We do watch retweets [sharing a tweet to a citizen's own Twitter network], when people mention us on Follow Fridays [#FF] and all those different things that show that some messages move better in different channels. But we don't follow people back [to show] that we don't have an official relationship with [them] if they are not a local, state or federal entity. We don't want to imply that we support or endorse an individual and their opinions and different things we just don't follow unless we have that relationship. So we can't [exchange] direct messages.

While interactions with valuable online content are traceable for government, social media are clearly not used for back-and-forth conversations that might lead to innovative insights or ideas on how “for example” government operations can be improved.

Appendix

Research Design

This report is part of a long-term research project on the use of social media in the U.S. government. Data for this paper was collected using a digital ethnography approach over the course of five years. The researcher participated in ongoing online interactions with the government communicator community on the microblogging service Twitter using the search hashtags #Gov20, #SocialGov and #GovTech (recently #SMMEASURE was added to the observations). For this report, the focus was on online observations of social media interactions of government officials by tracking their behavior on all available social media channels, as well as their articulated problem statements and resolutions provided online to the community.

In addition, social media directors in the 15 departments of the executive branch in the U.S. federal government were interviewed. The interviews were recorded with the permission of the interview partners and then transcribed verbatim. The goal of the data collection was to obtain a complete inventory of all 15 departments; additional interviews with agencies mentioned by the interview partners as innovators were added to the initial set. This snowball sampling approach started with innovators that were identified by the researcher and with each interview partner, additional contacts were established and interviews were added to the final set.

The “elite” interviews lasted between 60 and 90 minutes. The interview outline was semi-structured and constructed based on the initial online observations. The interview guideline covered a wide range of topics, including the strategic intention of the use of social media, mission support, organizational embeddedness, including roles and responsibilities, internal decision making processes as well as implementation processes, day-to-day governance and management processes, resulting online tactics, perceptions of best practices across the federal government and outside of government (in the business and nonprofit sectors) and measurement of online impact.

The data analysis applied a triangulation approach: Observable online behavior indicating the extent of social media adoption in the public sector and the formally articulated organizational intent extracted from social media handbooks and policies were used to inform the initial interviews with social media directors. In turn, their articulated perceptions of the organizational decision making processes were compared again to the available documents, and more importantly, to the web coding results of observable online practices. Over time, a process tracing approach was used to understand how top-down policies from the White House, OMB, the Office of Science Technology Policy, and the Government Accountability Office, as well as best practice guidance available through the General Services Administration's (GSA) HowTo.gov website were integrated into organizational practices.

Additional Resources

- GSA: Social Media Metrics for Federal Agencies, available online: <http://www.howto.gov/social-media/using-social-media-in-government/metrics-for-federal-agencies>
- GSA webinar: Above and Beyond Metrics: Tell a Story with Reports, available online: <http://www.howto.gov/training/classes/beyond-metrics>
- GSA webinar: How to Create an Annual Metrics Report, available online: <http://www.howto.gov/training/classes/create-annual-metrics-report>

References

- Aitoro, J. R. (2009). GSA Signs Deals for Agencies to Use Social Networking Sites. *NextGov*, 03/25/2009, online. http://www.nextgov.com/nextgov/ng_20090325_5490.php?oref=search
- Boyd, D. M., and Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1). <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>
- Christensen, C. M., and Overdorf, M. (2000). Meeting the Challenge of Disruptive Change. *Harvard Business Review*, March–April 2000, 65–76.
- Cormode, G., and Krishnamurthy, B. (2008). Key differences between Web 1.0 and Web 2.0. *FirstMonday—Peer Reviewed Journal of the Internet*, 13(6), 1–19.
- Franks, P. C. (2010). *How Federal Agencies Can Effectively Manage Records Created Using New Social Media Tools*. IBM Center for The Business of Government. Washington, D.C.
- General Services Administration (2010). Landmark Agreements Clear Path for Government New Media. U.S. General Services Administration, #10572. Washington, D.C., <http://www.gsa.gov/portal/content/103496>
- Halpern, D., and Katz, J. E. (2012). *From e-government to Social Network Government: Towards a Transition Model*. Paper presented at the WebSci 2012, Evanston, Illinois, USA.
- Hazlett, S.-A., & Hill, F. (2003). E-government: the realities of using IT to transform the public sector. *Managing Service Quality*, 13(6), 445–452.
- Joinson, A. N. (2008). 'Looking at', 'Looking up' or 'Keeping up with' People? Motives and Uses of Facebook. Paper presented at the CHI 2008, Florence, Italy.
- Library of Congress. (2010). Twitter Donates Entire Tweet Archive to Library of Congress. Retrieved 11/16/2010, from <http://www.loc.gov/today/pr/2010/10-081.html>
- Melitski, J. (2003). Capacity and E-Government Performance: An Analysis Based on Early Adopters of Internet Technologies in New Jersey. *Public Performance & Management Review*, 26(4), 376–390.
- Mergel, I. (2010). Government 2.0 Revisited: Social Media Strategies in the Public Sector. *PA Times*, American Society for Public Administration, 33(3), 7 and 10.

- Mergel, I. (2012). Tools Help Agencies Manage Social Media Messaging. *NextGov*. <http://www.nextgov.com/technology-news/tech-insider/2012/10/government-finding-measured-voice-social-media/58923/>
- Mergel, I., and Bretschneider, S. (2013). Theoretical Model of Adoption Process with Application to Social Media Practices in the Public Sector: Where the formal and informal organizations meet! *Public Administration Review*, 73(3), 390–400.
- Moon, M. J. (2002). The Evolution of E-Government among Municipalities: Rhetoric or Reality? *Public Administration Review*, 62, 424–433.
- Naaman, M., Boase, J., & Lai, C.H. (2010). *Is it really about me?: message content in social awareness streams*. Paper presented at the CSCW '10 Proceedings of the 2010 ACM conference on computer supported cooperative work. Savannah, Georgia, USA.
- O'Reilly, T. (2007). What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software. *Communications & Strategies*, 65(1), 17–37.
- Orszag, P. R. (2010). Guidance for Agency Use of Third-Party Websites and Applications—Memorandum for the Heads of Executive Departments and Agencies. *M-10-23*. http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-23.pdf
- Stowers, G. N. L. (2004). Measuring the Performance of E-Government. In I. C. f. t. B. o. Government (Ed.), *E-Government Series* (Vol. March 2004). Washington, D.C.: IBM Center for The Business of Government.
- The White House. (2009). The Open Government Initiative. <http://www.whitehouse.gov/open>
- The White House. (2010a). Guidance for Agency Use of Third-Party Websites and Applications—Memorandum for the Heads of Executive Departments and Agencies. *M-10-23*. http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-23.pdf
- The White House. (2010b). Guidance for Online Use of Web Measurement and Customization Technologies. http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-22.pdf
- The White House. (2010c). Social Media, Web-Based Interactive Technologies, and the Paperwork Reduction Act. 7. http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/SocialMediaGuidance_04072010.pdf
- The White House. (2012). Digital Government: Building a 21st Century Platform to Better Serve the American People. <http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government-strategy.pdf>
- Tolbert, C. J., and Mossberger, K. (2006). The Effects of E-Government on Trust and Confidence in Government. *Public Administration Review*, 66(3), 354–369.
- West, D. M. (2004). E-Government and the Transformation of Service Delivery and Citizen Attitudes. *Public Administration Review*, 64(1), 15–27.

About the Author

Dr. Ines Mergel is an Associate Professor of Public Administration at the Maxwell School of Citizenship and Public Affairs at Syracuse University. She was previously a postdoctoral research fellow at Harvard's Kennedy School of Government, Program of Networked Governance, and at the National Center for Digital Government. Professor Mergel teaches in the Master of Public Administration program courses on Social Media Management in the Public and Nonprofit Sector, Digital Government and the core class Public Organizations & Management. Her research interest focuses on the adoption and affordance of new media technologies in the public sector.



A native of Germany, Professor Mergel received a BA and MBA equivalent in business economics from the University of Kassel, Germany. She received a Doctor of Business Administration in information management from the University of St. Gallen in Switzerland and spent six years as pre- and postdoctoral fellow at Harvard's Kennedy School of Government, where she conducted research on public managers' informal social networks and their use of technology to share knowledge.

Professor Mergel's work has been published in, among others, the *Journal of Public Administration Research and Theory*, *Public Administration Review*, *Public Management Review*, *American Review of Public Administration*, *Journal of Public Affairs Education*, *International Public Management Journal* and *Government Information Quarterly*.

Her books, *Social Media in the Public Sector: A Guide to Participation, Transparency and Collaboration in the Networked World* and *Social Media in the Public Sector Field Guide: Designing and Implementing Strategies and Policies*, were published in 2012 with Jossey-Bass/Wiley. The IBM Center has published two previous reports by Dr. Mergel: *Working the Network: A Manager's Guide for Using Twitter in Government* and *Using Wikis in Government: A Guide for Public Managers*.

Key Contact Information

To contact the author:

Dr. Ines Mergel

Associate Professor
Department of Public Administration and International Affairs
Maxwell School of Citizenship and Public Affairs
Syracuse University
215 Eggers Hall
Syracuse, NY 13244
(315) 443-5100

e-mail: iamergel@maxwell.syr.edu

Social media contacts:



Twitter: [@inesmergel](https://twitter.com/inesmergel)



LinkedIn: <http://www.linkedin.com/in/inesmergel>



Social media in the public sector blog: <http://inesmergel.wordpress.com>



Reports from **IBM Center for The Business of Government**

For a full listing of IBM Center publications, visit the Center's website at www.businessofgovernment.org.

Recent reports available on the website include:

Acquisition

Eight Actions to Improve Defense Acquisition by Jacques S. Gansler and William Lucyshyn
A Guide for Agency Leaders on Federal Acquisition: Major Challenges Facing Government by Trevor L. Brown
Controlling Federal Spending by Managing the Long Tail of Procurement by David C. Wylde

Collaborating Across Boundaries

Adapting the Incident Command Model for Knowledge-Based Crises: The Case of the Centers for Disease Control and Prevention by Chris Ansell and Ann Keller
Engaging Citizens in Co-Creation in Public Services: Lessons Learned and Best Practices by Satish Nambisan and Priya Nambisan
Using Crowdsourcing In Government by Daren C. Brabham

Improving Performance

Four Actions to Integrate Performance Information with Budget Formulation by John Whitley
Incident Reporting Systems: Lessons from the Federal Aviation Administration's Air Traffic Organization by Russell W. Mills
Predictive Policing: Preventing Crime with Data and Analytics by Jennifer Bachner
The New Federal Performance System: Implementing the GPRA Modernization Act by Donald Moynihan

Innovation

The Persistence of Innovation in Government: A Guide for Innovative Public Servants by Sandford Borins

Leadership

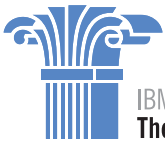
Best Practices for Succession Planning in Federal Government STEMM Positions by Gina Scott Ligon, JoDee Friedly, and Victoria Kennel

Managing Finance

Managing Budgets During Fiscal Stress: Lessons For Local Government Officials by Jeremy M. Goldberg and Max Neiman

Using Technology

Cloudy with a Chance of Success: Contracting for the Cloud in Government by Shannon Howle Tufts and Meredith Leigh Weiss
Federal Ideation Programs: Challenges and Best Practices by Gwanhoo Lee



IBM Center for
The Business of Government

About the IBM Center for The Business of Government

Through research stipends and events, the IBM Center for The Business of Government stimulates research and facilitates discussion of new approaches to improving the effectiveness of government at the federal, state, local, and international levels.

About IBM Global Business Services

With consultants and professional staff in more than 160 countries globally, IBM Global Business Services is the world's largest consulting services organization. IBM Global Business Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues, and the ability to design, build, and run those solutions in a way that delivers bottom-line value. To learn more visit: ibm.com

For more information:

Daniel J. Chenok

Executive Director

IBM Center for The Business of Government

600 14th Street NW

Second Floor

Washington, DC 20005

202-551-9342

website: www.businessofgovernment.org

e-mail: businessofgovernment@us.ibm.com

Stay connected with the
IBM Center on:



or, send us your name and
e-mail to receive our newsletters.