The impact of polices on government social media usage: Issues, challenges, and recommendations

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Abstract

Government agencies are increasingly using social media to connect with those they serve. These connections have the potential to extend government services, solicit new ideas, and improve decision-making and problem-solving. However, interacting via social media introduces new challenges related to privacy, security, data management, accessibility, social inclusion, governance, and other information policy issues. The rapid adoption of social media by the population and government agencies has outpaced the regulatory framework related to information, although the guiding principles behind many regulations are still relevant. This paper examines the existing regulatory framework and the ways in which it applies to social media use by the U.S. federal government, highlighting opportunities and challenges agencies face in implementing them, as well as possible approaches for addressing these challenges.

1. Social media and government

Social media refers to a set of online tools that are designed for and centered around social interaction. In practice, social media serves as a catchall phrase for a conglomeration of web-based technologies and services such as blogs, microblogs (i.e., Twitter), social sharing services (e.g., YouTube, Flickr, StumbleUpon, Last.fm), text messaging, discussion forums, collaborative editing tools (e.g., wikis), virtual worlds (e.g., Second Life), and social networking services (e.g., Facebook, MySpace) (Hansen, Shneiderman, & Smith, 2011). These tools vary dramatically in their purposes and approaches, but they share an emphasis on enabling users to communicate, interact, edit, and share content in a social environment (Porter, 2008; Tepper, 2003). Unlike traditional media, social media relies on user-generated content, which refers to any content that has been created by end users or the general public as opposed to professionals. Traditional media such as radio, books, and network television is primarily designed to be a broadcast platform (one-to-many), whereas social media is designed to be a dialogue (many-to-many interaction) (Porter, 2008). This many-to-many interaction allows large groups of geographically dispersed users to produce valuable information resources (Bendersky, 2002), solve challenging problems by tapping into unique and rare expertise (Brabham, 2008), and gain diverse insights and perspectives through discussion.

While the term social media is relatively new, the idea of using online tools to facilitate social interaction across time and space has been with us for decades in the form of email lists, Usenet, and Bulletin Boards. These early forms of social media showed that surprisingly rich social worlds with their own unique cultures can emerge through something as simple as text-based conversations with strangers (Burnett & Bonnici, 2003; Burnett & Buerkle, 2004; Smith & Kollok, 1999), particularly if those conversations can be overheard by others (Hansen, 2009). Over time a range of new social media services have emerged, each with its own unique architecture that shapes the types of interactions that can occur (Lessig, 2006), as well as the way user-contributed data is managed. Services differ in their scope, the pace of interaction, the type of content being shared (e.g., videos, images, text), who can control the data, the types of connections between users and items, and data retention policies (Hansen et al., 2011). Indeed, small changes in the design of social media tools and policies around them can be vital to their success and failure (Maloney-Krichmar & Preece, 2005; Preece, 2000). Despite these differences, this paper focuses on social media as a group because many of the regulations that affect one tool also affect other tools.

Social media technologies are now regularly employed by a majority of internet users. Among younger users, the use of these tools is nearing universal, such as 86% of 18–29 year olds using social media everyday (Madden, 2010). Similarly, 72% of adults and 87% of teens use text messages everyday (Lenhart, 2010). In July 2010, Facebook announced that it had over 500 million users. As the number of users has increased there has been a growing interest in applying social media toward addressing national priorities (Pirolli, Preece, & Shneiderman, 2010), not just using them for entertainment or corporate purposes.

President Obama became a strong advocate for the use of social media when he was presidential candidate Obama. A great deal of fundraising and organizing success of the Obama presidential campaign
was tied directly to the extensive use of social media by the campaign (Jaeger, Paquette, & Simmons, 2010). Both at the behest of the Obama administration and as a natural outgrowth of the frequent use of social media by individuals, federal government agencies have enthusiastically embraced the use of social media for government purposes.

Government employment of social media offers several key opportunities for the technology (Bertot, Jaeger, Munson, & Glaisyer, 2010):

- Democratic participation and engagement, using social media technologies to engage the public in government fostering participatory dialogue and providing a voice in discussions of policy development and implementation.
- Co-production, in which governments and the public jointly develop, design, and deliver government services to improve service quality, delivery, and responsiveness.
- Crowdsourcing solutions and innovations, seeking innovation through public knowledge and talent to develop innovative solutions to large-scale societal issues. To facilitate crowdsourcing, the government shares data and other inputs so that the public has a foundational base on which to innovate.

Though not mutually exclusive, these opportunities offer great promise and pose new challenges in redefining government-community connections and interactions. As government social media initiatives are launched and evaluated, design lessons can be extracted and shared to achieve these and related goals (e.g., Johnston & Hansen, in press).

Much government activity is now focused on social media, with social media becoming a central component of e-government in a very short period of time (Bertot, Jaeger, & Grimes, 2010a, 2010b; in press; Bertot, Jaeger, Munson, & Glaisyer, 2010; Chang & Kannan, 2008; Drapeau & Wells, 2009; Noveck, 2008; Osimo, 2008; Snyder, 2009). U.S. federal agencies have been using blogs, microblogs, wikis, and social networking sites (Godwin, 2008; Laris, 2009), and even virtual worlds (Miller, 2009), among other social media, to create records, disseminate information, communicate with the public and between agencies for several years (Barr, 2008; Hanson, 2008; Snyder, 2009; Wyld, 2008). The General Services Administration has even created a standard agreement for social media providers to allow for government usage of social media services. The Obama administration has made a priority of the use of social media technologies, and the new Federal Chief Information Officer is strongly encouraging the expansion of these activities (Lipowicz, 2009; Thibodeau, 2009).

Not only is the Obama administration strongly encouraging agencies to use social media to provide information, communicate with members of the public, and distribute services, it has also made a priority of public usage of social media to participate in government (Jaeger & Bertot, 2010; Jaeger, Paquette, & Simmons, 2010). And many members of the public already expect that government services will be available electronically and that government agencies will be accessible via social media technologies (Jaeger & Bertot, 2010). The widespread adoption of these social media tools has been emphasized in a number of different White House reports, such as the 2009 report entitled Open Government: A Progress Report to the America People, which discuss how social media is being used by agencies to promote transparency.

Though agencies are increasing their use of social media technologies as a way to extend government services, further reach individuals, offer government information, and engage members of the public in government efforts, agencies are in large part doing so through an antiquated policy structure that establishes the parameters for information flows, access, and dissemination. The next section of the paper discusses this policy environment as it applies to social media technologies.

2. Government social media usage and the law

Federal information policies can come from a large number of sources, including legislation, regulations as contained in the Code of Federal Regulations, directives (such as the Open Government Directive issued by the Office of Management and Budget, which mandated that agencies create an open government plan), Circulars, and Executive Orders. Though there is a range of reasons why these policies exist, information policies primarily govern issues of safety, trust, security, ownership rights, social inclusion, participation, and record keeping. Within these broader topics are critical areas related to privacy, e-participation and democratization, access, and engagement.

Table 1 presents selected policies and their requirements as they impact federal agency use of social media in terms of three key policy objectives. While these policy instruments predominantly predate the existence of social media, their reach extends to agency interaction with and use of social media technologies. And yet, agencies largely do not consider these policy instruments when using social media. In many cases, the social media technologies have been implemented without regard even to the policy goals in Table 1. In April 2010, the Office of Management and Budget (OMB) issued a memorandum on social media, Web-based interactive technologies, and paper-work reduction. The memo focused on agency use of social media in relation to the requirements of the Paperwork Reduction Act (PRA), trying to ensure that agencies complied with the requirements of the PRA, which are detailed below. However, major policy goals of access, inclusion, privacy, security, accuracy, archiving, and copyright have yet to be addressed. The relationships of these policies to social media are explored below in light of each of the policy goals. Appendix A provides a detailed description of many of the policies related to social media usage by government.

2.1. Access and social inclusion

For government use of social media to increase access to government information and services and to successfully facilitate civic participation, members of the public must be able to access and use

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<td>Access and social inclusion</td>
<td>• Americans with Disabilities Act</td>
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<td>• OMB Circular A-130 (Management of Federal Information Resources)</td>
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<td>• Paperwork Reduction Act</td>
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<td>• Various Copyright (Title 17 USC) and Patent &amp; Trademark (Title 35 USC) legislation</td>
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social media technologies. Several policy instruments are directly related to access and inclusion in social media. And, the ability to use social media technologies by the public is predicated on the following (Bertot, Jaeger, Munson, & Glaisyer, 2010):

1) Access to the technologies (which at a minimum necessitates a device and internet access at a speed sufficient to support social media content); and,

2) The development of technology, programs, and internet-enabled services that offer equal access to all users; and,

3) Information and civics literacy necessary to understand government services, resources, and operations.

For example, Executive Order 13166—Improving Access to Services for Persons with Limited English Proficiency requires that agencies provide appropriate access to persons with limited English proficiency, encompassing all “federally conducted programs and activities,” including using social media technologies to communicate and collaborate with members of the public. This policy objective is meant to address the fact that there are highly pronounced gaps in e-government usage among people who predominantly speak a language other than English, as little e-government content is available in non-English formats; for example, 32% of Latinos who do not speak English use the internet, but 78% of Latinos who speak English use the internet (Fox & Livingston, 2007).

Many of these policies focus on access for people with disabilities, as they are the most disadvantaged population in the United States in relation to computer and internet access (Jaeger, 2011). Percentages of computer and internet usage have remained at levels approximately less than half of the equivalent percentages for the rest of the population since the advent of the Web (Dobransky & Hargittai, 2006; Jaeger, 2011; Lazar & Jaeger, 2011). Several of the instruments that would seem to guarantee access to government use of social media for persons with disabilities result from the broad protections of disabilities rights laws. The Individuals with Disabilities Education Act requires equal access to all electronic materials used in public education. The Americans with Disabilities Act provides broad prohibitions on the exclusion of persons with disabilities from government services and benefits, including communication with the government. Section 504 of the Rehabilitation Act creates broad standards of equal access to government activities and information for individuals with disabilities, which includes content distributed via social media, and establishes general rights to accessible information and communication technologies, which includes social media tools.

Other laws focus more directly on information and communication technology usage by the government. The Telecommunications Act of 1996 promotes the development and implementation of accessible information and communication technologies used online. Most directly, Section 508 requires that electronic and information technologies purchased, maintained, or used by the federal government meet certain accessibility standards designed to make online information and services fully available to people with disabilities. Agencies, as well as entities receiving federal funding, implementing social media technology-based services must pay particular attention to complying with the requirements of Section 508. Agencies employing non-Federal services to provide social media technology capabilities are also required to ensure that persons with disabilities have equivalent access to the information on these third party sites as required in Section 508.

Social media companies rarely consider the accessibility requirements of Section 508, yet this inaccessibility has not been a deterrent to the use of social media by government agencies. For persons with disabilities, social media often means a reduced ability to participate. For example, recent studies have found that the “accessible” version of Facebook has fewer features and greatly reduced usability and functionality, considerably limiting the utility and usefulness of the site for users with disabilities (Lazar & Wentz, 2011; Wentz & Lazar, 2011). As many social media tools are inaccessible to people with disabilities, and websites increasingly embed social media technologies within them, the accessibility of websites has steadily decreased (Carlson, 2004; Harper & DeWaters, 2008). While future technological developments may overcome such inaccessibility, the current situation raises concern for inclusion of people with disabilities in government use of social media.

2.2. Privacy, security, accuracy, and archiving

Social media technologies raise a large number of information management issues, primarily in the areas of privacy, security, accuracy, and archiving, spanning major issues such as personally identifiable information, security of government data and information, and the accuracy of publicly available data. By adopting the use of specific social media tools, government agencies appear to be tacitly endorsing the privacy, security, and other policies employed by those social media providers as adequate.

Some of the related policies are very specific and tailored to the online environment. For example, the Children’s Online Privacy Protection Act (COPPA) prohibits the collection of individually identifiable information from children under the age of 13. However, the majority of related policy instruments address these issues in a broad, non-specific fashion, which may include social media contexts within their broad scope. Overall, these policy instruments address many issues of information management related to social media, but fail to sufficiently address at an operational level many important issues of information management impacted by social media.

OMB Memo M-04-04 (E-Authentication Guidance for Federal Agencies) mandates that agencies decide the appropriate levels of openness, moderation, authentication, and attribution, balancing access, identity authentication, attribution, and concern for authoritative sourcing in the level of moderation that is needed on an agency website. To accomplish this, agencies must perform a standardized risk assessment on all applications they put online. Similarly, the Federal Information Security Management Act (FISMA) requires a Certification and Accreditation (C&A) process for all federal information technology systems that utilize social media technologies. Further, this C&A activity must be performed by an independent third party auditing team and must conform to the Risk Management Framework of the National Institute of Standards and Technology.

The Information Quality Act (passed into law in 2001) requires agencies to maximize the quality, objectivity, utility, and integrity of information and services provided to the public. The Act came into effect prior to the development and use of prevailing social media technologies; nonetheless, agencies must ensure reasonable suitable information and service quality strategies consistent with the level of importance of the information that include clearly identifying the limitations inherent in the information dissemination product (e.g., possibility of errors, degree of reliability, and validity) and taking reasonable steps to remove the limitations inherent in the information.

Under OMB Memo M-03-22 (Guidance for Implementing the Provisions of the E-government Act of 2002), federal public websites, including those using social media technologies, are required to conduct privacy impact assessments, post privacy policies in a standardized machine-readable format on each website, and post a “Privacy Act Statement” that describes the Agency’s legal authority for collecting personal data and how the data will be used. Additionally, federal websites are prohibited from using persistent cookies and other web tracking methods unless an Agency head or designated Agency sub-head approved their use for a compelling need. In such cases, agencies must post clear notice of the nature of the information.
collected in the cookies, the purpose and use of the information, whether or not and to whom the information will be disclosed, and the privacy safeguards applied to the information collected. The Privacy Act did not envision a time in which people would be voluntarily communicating with government agencies in digital “open spaces” like Twitter.

When government websites become two-way communities, it opens the possibility of virus and other attack agents being inserted into the government environment, as well as the possibility of unintended release of information. OMB Memo M-05-04 (Policies for Federal Agency Websites) requires that agencies provide adequate security controls to ensure information is resistant to tampering, to preserve accuracy, to maintain confidentiality as necessary, and to ensure that the information or service is available as intended by the Agency and as expected by users. This memo raises issues in several different social media contexts. Many social media services are hosted outside government websites (e.g., Facebook, Twitter, YouTube). Under this memo, agencies are required to establish and enforce explicit Agency-wide linking policies that set out management controls for linking beyond the Agency to outside services and websites. This memo establishes that providing disclaimers detailing the level of moderation found on third party sites is appropriate on these notification screens, while pop-up or intermediary screens should be used to notify users that they are exiting a government website. Additionally, many social media services allow users to take data from one website and combine it with data from another, commonly referred to as mashups. According to this memo, agency public websites are required, to the extent practicable and necessary to achieve intended purposes, to provide all data in an open, industry standard format that permits users to aggregate, disaggregate, or otherwise manipulate and analyze the data to meet their needs.

The presence of a related policy, however, does not guarantee the application of a solution to an information management issue raised by social media. For over 150 years, the Government Printing Office (GPO) has served as the lead and coordinating agency in conjunction with the Federal Depository Library Program (FDLP)—a network of nearly 150 full, partial, and regional Depositories. This collaborative network has served as the primary means for providing community access to government information. However, the ability of social media to provide direct constituent and government interactions raises major challenges for the comprehensive collection and dissemination of government information. Digitization is transforming the FDLP structure and the nature of government interactions with constituents. As social media technologies are increasingly deployed by government agencies, responsibility for codifying, disseminating, and providing access to official government information remains an unanswered question (Jaeger, Bertot, & Shuler, 2010; Shuler, Jaeger, & Bertot, 2010). While responsibilities for archiving social media interactions remain unaddressed, much of this information disappears.

This situation also means that there decreasingly exists a permanent and final “document,” upon which nearly all records management and archiving efforts are built (Bertot, Jaeger, Munson, & Glaisyer, 2010). By using third party applications and software that reside on non-governmental information systems, data ownership, records schedules, and archiving are significant issues. To address these issues, agencies could begin working in collaboration with the National Archives and Records Administration (NARA), the GPO, and the FDLP libraries to ensure the permanency of the public record regarding social media technologies. This will be particularly significant as the policy making and public comment process migrates increasingly to online venues.

2.3. Governing and governance

Policy instruments also establish the parameters of governing and governance. These instruments provide broad principles and guidance for agencies, but fail to address the use of social media, as nearly all pre-date the development and use of social media technologies. Much of such guidance is encapsulated in OMB Circular A-130 and the PRA establish principles that:

- Agencies are required to disseminate information to the public in a timely, equitable, efficient, and appropriate manner.
- Agencies are required to establish and maintain Information Dissemination Product Inventories.
- Agencies must consider disparities of access and how those without internet access will have access to important disseminations.
- Agencies should develop alternative strategies to distribute information.
- When using electronic media, the regulations that govern proper management and archiving of records still apply.
- Agencies need to evaluate and determine the most appropriate methods to capture and retain records on both government servers and technologies hosted on non-Federal hosts.
- Agencies are required to provide members of the public who do not have internet connectivity with timely and equitable access to information, for example, by providing hard copies of reports and forms.

When considering these principles in light of social media technologies, a range of issues surface, such as: the need for alternative dissemination strategies for access to and dissemination of government information and services; the need for ubiquitous access to internet-embedded information content; and the need to consider records management, archiving, and preservation. While social media technologies have the potential to reach a large percentage of the public, social media technologies can also exclude users without internet access, including economically disadvantaged persons, from receiving such information. Also, some social media technologies require high-speed internet access and bandwidth, which may not be available in rural areas or may be unaffordable.

The E-government Act of 2002 also established several related standards for e-government that inform the use of social media by government agencies, such as: developing priorities and schedules for making government information available and accessible to the public; posting inventories on agency websites; publishing annual reports on inventories, priorities, and schedules; complying with requirements of Section 508 of the Rehabilitation Act in all online activities; and implementing and maintaining an Information Dissemination Management System.

Though not exhaustive, the above sections demonstrated that there is a substantial disconnect along several issue areas between existing information policies and government use of social media technologies. While one may argue that agencies should continue to forge ahead with the adoption and use of social media due to their ability to offer government services where individuals increasingly are with their online usage, there is a need to update the information policy context to better guide agencies—as well as set security, privacy, and other parameters—with social media technologies.

3. Gaps in existing policy and attempts to address them

The unique nature of social media technologies—and the basis of their mass appeal and strength as a government tool—lies in their ability to create an immediate and interactive dialogue. But this nature also creates important policy challenges as these technologies continue to be used more extensively both by governments and the public. Though the current policy environment addresses many issues of privacy, security, accuracy, and archiving in some detail, much of the policy related to the use of social media predates the creation of social media technologies. As a result, many of the existing policies do not adequately address the technological capacities, operations, or functions of social media. Further, as social media provide new
ways to combine previously unavailable and/or separately maintained data, there are now cross-dataset concerns that impact multiple policy issues. Finally, it is important to consider that social media services are private ventures with their own acceptable use, data use, accessibility, and privacy policies that often do not conform to federal requirements.

Consider the following issues related to social media that are partially addressed or not addressed at all by current policy:

- Ensuring information disseminated through social media is consistently available;
- Making information available through social media available in other formats for those who lack equal access due to infrastructure, ability, language, or literacy;
- Maintaining consistency of access for government agencies and for members of the public;
- Archiving information disseminated through social media for permanent access and retrieval;
- Preventing release of sensitive or secret information;
- Fostering transparency and accountability, through which government is open and transparent regarding its operations to build trust and foster accountability;
- Ensuring the security of personally identifiable information;
- Maintaining security of user information;
- Providing a continuously updated data.gov registry, with an historical index that shows current and past data availability;
- Ensuring that third-party social media technology providers (e.g., Twitter, Facebook, YouTube, Second Life) adhere to government privacy, security, and accuracy policies and requirements;
- Ensuring that individual-government transactions that transpire through social media technologies are confidential, private, and/or secure as required by federal laws and policies;
- Ensuring continuity of service, especially when technologies sun-set. For example, Yahoo announced the discontinuation of its delicious tagging service (http://www.readwriteweb.com/archives/rip_delicious_you_were_so_beautiful_to_me.php).
- Ensuring that mashups and other forms of data integration—an increasing activity due to data availability via data.gov—do not lead to user profile development that invades privacy or otherwise compromises individuals, national security, or agency data security;
- Monitoring the storage of government information when held off-site through cloud computing services. Allowing private companies to maintain potentially sensitive government data raises numerous questions of data retrieval, accuracy, and permanence, as well as opens up significant opportunities for misuse of data by providers or attempts by other governments to access the data based on the geographic location of the server farms where the data are maintained; and
- Ensuring that social media technologies are not the only means of getting a response from an agency.

This list is by no means exhaustive, and each type of social media technology raises its own specific set of policy issues.

The Obama Administration is aware of and trying to address at least some of these policy shortcomings. Since April 2010, OMB has issued three significant memos regarding Federal agency use of and interaction with social media technologies: 1) M-10-22 (Guidance for Online Use of Web Measurement and Customization Technologies); 2) M-10-23 (Guidance for Agency Use of Third-Party Websites and Applications); and an unnumbered memo issued on April 7, 2010 by Cass Sunstein entitled “Social Media, Web-Based Interactive Technologies, and the Paperwork Reduction Act.”

Memo M-10-22 (Guidance for Online Use of Web Measurement and Customization Technologies) broadens the definition of tracking technologies to now include all “web measurement and customization technologies,” even going so far as to explicitly state that “this guidance is not limited to any specific technology or application (such as persistent cookies).” More significantly, it explicitly promotes the use of these measurement and customization technologies to achieve some of the benefits other sites that use them enjoy including website analytics and customization of the user experience. This is consistent with the other memos by the Obama administration that emphasize the benefits or perceived benefits of enabling the use of social media technologies. There are still prohibitions such as tracking individual-level activity outside of the website, sharing the data with other departments or agencies, and cross-referencing the data with personally identifiable information. To safeguard users, notification of the ability to opt out or opt in must be provided, along with additional information in the privacy policy. However, despite the prohibitions and safeguards, the message of allowing these technologies that are becoming increasingly important to social media tools comes through clearly.

OMB Memo M-10-23 (Guidance for Agency Use of Third-Party Websites and Applications) accounts for the increasing amount of internet activity that occurs on third-party sites such as Facebook, Twitter, YouTube, and other social media. Like OMB Memo M-10-22, the focus is on protecting participants' privacy, but in the context of third parties. While some earlier memos touched on websites hosted by contractors or data held by third parties (e.g., M-03-22), the default assumption was that government agencies were in complete control of the content and data management activities on the sites.

Government agencies interact via the internet in several ways with third parties. As specific social media sites such as Facebook have become important platforms for information exchange, government agencies have created a presence on them. Agencies have also begun including third party widgets, modules, snippets, and plug-ins on their own websites. These are mini applications with dynamic content or services that are embedded within another web page. Finally, many social media and related sites offer Application Programming Interfaces (APIs) that allow other programs and sites to call upon their content and services. These support mashups that combine data from different sources into an integrated user experience, such as a Google Map that has user-generated content on nursing homes overlaid on it.

The content of OMB Memo M-10-23 builds on a number of existing policies. There is a strong emphasis on privacy policies, Privacy Impact Assessments (PIAs), and the role of the Senior Agency Official for Privacy (SAOP), all of which were discussed in prior memos (e.g., M-03-22). These regulatory forms are all expanded upon in this memo to specifically deal with the “new questions” raised by agencies’ use of these new types of third party sites and services. For example, agencies with a presence on third party sites must provide a Privacy Notice, which is a “brief description of how the agency’s Privacy Policy will apply in a specific situation” such as the use of a third party site that has its own privacy policies. Finally, agencies are still encouraged to link to or otherwise alert (e.g., through the use of pop-up windows) users when they link to a third party website that is not part of the government domain.

The Memorandum (“Social Media, Web-Based Interactive Technologies, and the Paperwork Reduction Act”) written by Cass Sunstein on April 7, 2010 clarifies “when and how the Paperwork Reduction Act of 1995 (the PRA) applies to Federal agency use of social media and web-based interactive technologies.” The memorandum’s primary aim is to clarify that “certain uses of social media and web-based interactive technologies will be treated as equivalent to activities that are currently excluded from the PRA.” The memo is needed because the vagueness of the original law that specifies that the PRA applies to the collection of information “regardless of form or format,” but does not define information. Later OMB regulations excluded three types of activities discussed in the memo that were not considered “information”: general solicitations, public meetings, and like items.
The memo discusses each of these three exclusions, explaining how certain social media activities fall within them. For example:

• The memo explains that the PRA does not apply if social media tools are used to solicit general comments from the public (i.e., open-ended responses to questions) rather than answers to specific closed-ended survey questions under the general solicitations exclusion.

• The memo indicates that, through the public meetings exclusion, most regular social media activity is exempt from the PRA since “OMB considers interactive meeting tools—including but not limited to public conference calls, webinars, blogs, discussion boards, forums, message boards, chat sessions, social networks, and online communities—to be equivalent to in-person public meetings.”

• The memo identifies “like items” that are not “information” and thus not covered by the PRA. These include: 1) email addresses, usernames, passwords, and geographic locations gathered for account registration; 2) items collected to help navigate or customize a website; 3) ratings and rankings; and 4) items necessary to complete a voluntary commercial transaction, and contests, so long as they do not take the form of structured responses.

Even with the guidance provided by OMB, however, there remain a number of policy gaps in a range of areas. The area of access and inclusion provides a good example of how these different unanswered questions in the policy environment can fail to address the ways in which these different unanswered questions in the policy environment can fail to address the ways in which these different unanswered questions in the policy environment can fail to address the ways in which entire populations can be cut out of the use of social media to interact with government. Technological developments often benefit the already-technologically privileged (Corbridge, 2007; Hanson, 2008; Mackenzie, 2010). Government use of social media seems to favor access for those who already have access to other technologically-based means of government interaction.

As discussed above, disabilities and language can be barriers to access and usage of government social media services. These are not the only groups in this position of potential disenfranchisement, however. By shifting away from what were more familiar and accessible methods of information communication, and interaction, the use of social media can also distance users with limited technological literacy—the understanding of how to use technologies like computers and the internet. As lower levels of technological literacy are generally linked to lower levels of formal education and lower levels of ability to adapt to new technologies, users with lower technological literacy may be intimidated or driven from participation by social media (Jaeger & Thompson, 2003, 2004; Powell, Byrne, & Dailey, 2010).

4. Future directions

None of these policy gaps or questions that need further investigation is presented as reasons for government to reduce or avoid the use of social media. Indeed social media offers opportunities to provide new government functions and to invigorate established government functions, such as transparency (Bertot, Jaeger, & Grimes, 2010a, 2010b, in press). Instead, they are raised as issues to consider and address as social media becomes an increasing central aspect of presenting government information, connecting to government services, and engaging members of the public in governance and civic discourse.

While the role of social media technologies in government information services is still coalescing, there is time to analyze and research the standing of social media within the larger policy context and the changes that are necessary in the policy environment to ensure the success of the new technology. Table 2 below presents a set of policy and research questions related to the three key policy objectives discussed above, as well as two other essential areas for future consideration in research and policy: Social Media Use and New Democratic Models. These questions are not meant to be comprehensive, but instead to point to the range of important issues that require further examination in relation to the government use of social media.

Social media technologies are not the first new technological development that government agencies have adopted before consideration of existing policy requirements and goals. The implementation of new technologies “tends to depoliticize change by technologizing it, thereby muting questions of power, inequality, or exclusion” (Mackenzie, 2010, p. 183). Often, the quick adoption of new technologies has overridden other concerns, such as the rapid, yet uncoordinated, implementation of government agency websites that has resulted in the United States government being the largest provider of content online, yet lacking a uniform look or function to its sites the way that other governments do. Similarly, the decade-plus struggles in the adoption and deployment of broadband nationally despite a series of interventions provide another cautionary example for the implementation of social media without adequate consideration of the overall policy context (Paquette, Jaeger, & Wilson, 2010).

Bringing social media usage by government agencies in line with existing policies is a first essential step in the ongoing usage of social media with other government goals. And these policies must be understood within the broader policy and information contexts, as the government “is more than an allocator of services and values; it is an apparatus for assembling and managing the political information associated with expressions of public will and with public policy” (Bimber, 2003, p. 17). The aforementioned recent memos issued by OMB are a first attempt to move the federal government’s policies towards encompassing social media technologies. But these memos are incremental and do not address the larger policy modification needs. To navigate the discrepancies between traditional information policies that govern government information flows, access, and interaction, one suggested solution is a process of harmonization (Bertot, Jaeger, Shuler, Simmons, & Grimes, 2009; Jaeger, Bertot, & Shuler, 2010; Shuler, Jaeger & Bertot, 2010). Though the concept of harmonization has been proposed as an approach for e-government information generally, it can be especially useful within the context of social media. Such harmonization should be based on using the long-established core democratic principles such as:

• Fostering an engaged and informed public. Embedded deeply within the founding of the United States is access to government information, beginning with the Declaration of Independence and continuing through to e-government programs today (Jaeger & Bertot, 2011). This principle has existed in particular through more than 150 years through the Federal Depository Library Program (FDLP), through which the federal government and over 1200 libraries collaborate to provide access to and disseminate a wide range of government information to ensure an informed public. Fundamentally, it is essential for the public to have ready access to government in order to participate in democratic activities.

• Extending services and resources to where the public is. A key aspect of the FDLP, the establishment of agency regional offices, courts, and other government outposts are mechanisms to embed and make available federal government services at more local levels—thereby putting government closer to people and communities.

• Participatory democracy. Our government includes a number of means through which the public can participate in democratic activities—testimony at hearings, responses to regulation solicitations, contacting and interacting with elected officials, to name a few. The interaction between the public and government ensures that government remains of the people, for the people.

• Transparency and openness. The requirement that government make its information, data, and processes public and readily accessible provides accountability, an enhanced ability of the public to see into the workings of government, and the information to voice concerns about these workings, when necessary.
• Equity of access. A prevalent thread that weaves the nation's information policies is ensuring that the public, regardless of socio-economic status, geographic location, disability, availability of telecommunications technologies, or other factors that can contribute to gaps in access to information.

• Ensuring permanent access for an informed public. The archiving of government information is designed to ensure permanent access to the government record—regardless of how that information is created, stored, or retrieved.

These principles stretch back to the foundation of the Republic, as James Madison, Alexander Hamilton, and John Jay argued for these concepts in the Federalist Papers (1789) with the vision of a constitutional government would be the center of information in the new nation. In fact, information and communication appear as important concepts in 31 of the 85 essays in the Federalist Papers, with authors believing that information would both help link people to the process of governance and simultaneously prevent the formation of tyrannical majorities. These same principles also serve as a starting point for the harmonization process across the policies identified in this article.

In addition to utilizing a harmonization perspective to frame the government use of social media, the existing policies outlined above and detailed in Appendix A must receive greater attention in the decisions by agencies to use social media technologies. In many cases, the agencies may not even be aware of the range of related policies and the implications of those policies. An important first step would be the creation of a guide that would provide clear guidance to all agencies about the policies that must be considered in the adoption and use of social media. GSA (2010) has created a social media handbook, but there is need for a cross-agency social media guide specifically devoted to the relevant policies and their implications. Prior to proposing new policies to specifically address government use of social media, an explicit set of social media guidelines that encompasses all existing policies would help to clarify whether new policies are needed and what issues new policies would need to address.

A further important step would be building on social media usage as the impetus for examining the responsiveness of policy to technological change. For example, as agencies began adopting cloud computing services several years ago, this adoption raised many issues

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**Table 2**

Key policy and research questions related to social media and policy objectives.

<table>
<thead>
<tr>
<th>Policy objectives related to social media</th>
<th>Key policy and research questions</th>
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<tbody>
<tr>
<td><strong>Social Media Use</strong></td>
<td>• What tools and approaches best promote exchange between governments and users?</td>
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<td>• What mix of technologies, data, and information promote, support, and foster user engagement?</td>
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<td>• What technologies provide the best ways to display content to users for informed participation?</td>
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<td>• How can designers promote exposure to diverse viewpoints? What are individual preferences for opinion diversity in information access?</td>
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<td></td>
<td>• How can agencies best incorporate social media-produced feedback into policy and decision-making?</td>
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<tr>
<td></td>
<td>• How can governments create sustainable social media technology strategies and efforts?</td>
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<tr>
<td><strong>Access and social inclusion</strong></td>
<td>• What tools and approaches best promote universal access to social media technologies?</td>
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<td></td>
<td>• How do we ensure that social media technologies are inclusive, rather than exclusive?</td>
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<td></td>
<td>• Are there social media technologies that can facilitate access to persons with disabilities?</td>
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<td>• What mechanisms (e.g., partnerships, collaborations) can promote access to and participation in social media technologies to all members of society?</td>
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<td>• How can agencies leverage partnerships to extend social media applications and use within communities across the country?</td>
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<td></td>
<td>• What types of partnerships best promote use of and interaction with government through social media technologies?</td>
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<td></td>
<td>• How can agencies and organizations develop mutually beneficial partnerships?</td>
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<td></td>
<td>• What organizational, management, and operational structures are necessary to create successful partnerships?</td>
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<tr>
<td><strong>Privacy, security, accuracy, and archiving</strong></td>
<td>• What data and information search tools are necessary to facilitate access to and location of government data?</td>
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<td></td>
<td>• What review processes are required prior to government data dissemination through open government initiatives such as data.gov to ensure privacy, security, and accuracy?</td>
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<tr>
<td></td>
<td>• What data validity, reliability, and quality check processes could be adopted in order to ensure appropriate uses, combinations, and extrapolations of combined government (and other) datasets?</td>
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<td></td>
<td>• What cybersecurity measures, tools, and approaches are necessary to ensure national, agency, and individual security?</td>
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<td>• What tools and applications do agencies need to archive and preserve their social media-based activities?</td>
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<td></td>
<td>• What is the “document” that agencies preserve based on their social media activities?</td>
</tr>
<tr>
<td></td>
<td>• What policies and procedures are necessary to govern the scheduling and archiving of government social media activities?</td>
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<tr>
<td><strong>Governing and governance</strong></td>
<td>• How will agencies ensure the privacy of individuals, particularly when data may not be owned by government agencies?</td>
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<tr>
<td></td>
<td>• What data and information search tools are necessary to facilitate access to and location of government data?</td>
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<td></td>
<td>• What policies and procedures are necessary to govern the scheduling and archiving of government social media activities?</td>
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<tr>
<td><strong>New Democratic Models</strong></td>
<td>• What are the opportunities and limits on transformations that are compatible with the U.S. constitution, the precedents in the field of administrative law, political norms and traditions?</td>
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<tr>
<td></td>
<td>• What are the limits or parts of our system that should be prioritized?</td>
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<td>• What transformations could solve problems with our existing structures, and where are the biggest benefits to be had?</td>
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that policy was—and remains—unready to successfully address (Jaeger, Lin, & Grimes, 2008; Jaeger, Lin, Grimes, & Simmons, 2009; Paquette, Jaeger, & Wilson, 2010). When the adoption of new technologies by government agencies challenges relevance of current information policy, it is a clear indicator that the policy development and refinement process is not fleet enough for the current environment of rapid technological change that seems likely to continue into the foreseeable future. As new technologies that are currently unimagined will continue to emerge and be adopted by government agencies, the development of more responsive information policies that are based on principles that are not tied to specific technologies will be a vital step in ensuring that policies can remain relevant and useful to government agencies and members of the public.

Social media technologies have already taken an important place among means of communication between government and members of the public and are poised to continue to take on greater prominence as a mechanism of government information and services are more content moves onto this platform and more users come to expect to use social media as a primary method to interact with government. At its best, social media has the potential to simultaneously make government more reachable, available, and relevant to users, while offering users more opportunities to become actively engaged in government. To ensure that social media technologies enable some or all of this lofty potential, the policy issues related to social media must be closely examined and addressed while the uses of the technologies are still developing and evolving.

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### Appendix A. Descriptions of selected policy instruments related to government use of social media

<table>
<thead>
<tr>
<th>Policy instrument</th>
<th>Policy type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>OMB Memo M-05-04</td>
<td>Memo</td>
<td>When government websites become two-way communities, it opens the possibility of viruses and other attack agents being inserted into the government environment. Many of the security policies in OMB Memo M-05-04 have implications for Web 2.0 technologies:</td>
</tr>
<tr>
<td>Policies for Federal Agency Websites</td>
<td>Memo</td>
<td></td>
</tr>
<tr>
<td>OMB Memo M-04-04</td>
<td>Memo</td>
<td>• Agencies are required to provide adequate security controls to ensure information is resistant to tampering, to preserve accuracy, to maintain confidentiality as necessary, and to ensure that the information or service is available as intended by the Agency and as expected by users. Many social media services are hosted outside government websites (e.g., Facebook, Twitter, YouTube):</td>
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<tr>
<td>E-Authentication Guidance for Federal Agencies</td>
<td>Memo</td>
<td></td>
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<tr>
<td>OMB Memo M-10-22</td>
<td>Memo</td>
<td>• Agencies are required to establish and enforce explicit Agency-wide linking policies that set out management controls for linking beyond the Agency to outside services and websites. • Disclaimers detailing the level of moderation found on third party sites are often appropriate on these notification screens. • Pop-up or intermediary screens should be used to notify users that they are exiting a government website. Many social media services allow users to take data from one website and combine it with data from another, commonly referred to as mashups:</td>
</tr>
<tr>
<td>Guidance for Online Use of Web Measurement and Customization Technologies</td>
<td>Memo</td>
<td></td>
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<tr>
<td>OMB Memo M-10-23</td>
<td>Memo</td>
<td>• Agency public websites are required, to the extent practicable and necessary to achieve intended purposes, to provide all data in an open, industry standard format that permits users to aggregate, disaggregate, or otherwise manipulate and analyze the data to meet their needs. • Agencies need to ensure that these open industry standard formats are followed to maximize the utility of their data.</td>
</tr>
<tr>
<td>Guidance for Agency Use of Third-Party Websites and Applications</td>
<td>Memo</td>
<td></td>
</tr>
<tr>
<td>OMB Circular A-130 and Paperwork Reduction Act</td>
<td>Circular/Law</td>
<td></td>
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(continued on next page)
<table>
<thead>
<tr>
<th>Policy instrument</th>
<th>Policy type</th>
<th>Description</th>
</tr>
</thead>
</table>
| Rehabilitation Act of 1973                           | Law         | • Agencies are required to provide appropriate access to persons with limited English proficiency:  
  - Requires that agencies provide appropriate access to persons with limited English proficiency:  
    - Encompasses all "federally conducted programs and activities." Anything an Agency does, including using social media technologies to communicate and collaborate with members of the public, falls under the reach of the mandate.  
    - Agencies must determine how much information they need to provide in other languages based on an assessment of customer needs.  
  - Social media technologies are not different than any other technology used by the Federal government.  
  - Agencies employing non-Federal services to provide social media technology capabilities are also required to ensure that persons with disabilities have equivalent access to the information on these third party sites as required in Section 508.  
  - Agencies, as well as entities receiving federal funding, implementing social media technology-based services must pay particular attention to complying with the requirements of Section 508.  
  - Agencies are required to provide members of the public who do not have internet access, including economically disadvantaged persons, from receiving such information.  
  - Distribution would prevent users without internet access, including economically disadvantaged persons, from accessing important disseminations.  
  - Agencies are required to implement and maintain an Information Dissemination Management System.  
  - Agencies are required to develop priorities and schedules for making government information available and accessible to the public.  
  - Inventories must be posted on Agency websites.  
  - The annual E-Government Act report to OMB must contain information on the final inventories, priorities, and schedules.  
  - Compels agencies to comply with requirements of Section 508 of the Rehabilitation Act in all online activities.  
  - Agencies are required to provide appropriate access to persons with limited English proficiency:  
    - Clearly identifying the limitations inherent in the information dissemination product (e.g., possibility of errors, degree of reliability, and validity);  
    - Taking reasonable steps to remove the limitations inherent in the information; and  
    - Reconsider delivery of the information or services.  
| Executive Order 13166—Improving Access to Services for Persons with Limited English Proficiency | Executive Order | • Requires that agencies provide appropriate access to persons with limited English proficiency:  
  - Encompasses all "federally conducted programs and activities." Anything an Agency does, including using social media technologies to communicate and collaborate with members of the public, falls under the reach of the mandate.  
  - Agencies must determine how much information they need to provide in other languages based on an assessment of customer needs.  
  - Social media technologies are not different than any other technology used by the Federal government.  
  - Agencies employing non-Federal services to provide social media technology capabilities are also required to ensure that persons with disabilities have equivalent access to the information on these third party sites as required in Section 508.  
  - Agencies, as well as entities receiving federal funding, implementing social media technology-based services must pay particular attention to complying with the requirements of Section 508.  
  - Agencies are required to provide members of the public who do not have internet access, including economically disadvantaged persons, from receiving such information.  
  - Distribution would prevent users without internet access, including economically disadvantaged persons, from accessing important disseminations.  
  - Agencies are required to implement and maintain an Information Dissemination Management System.  
  - Agencies are required to develop priorities and schedules for making government information available and accessible to the public.  
  - Inventories must be posted on Agency websites.  
  - The annual E-Government Act report to OMB must contain information on the final inventories, priorities, and schedules.  
  - Compels agencies to comply with requirements of Section 508 of the Rehabilitation Act in all online activities.  
  - Agencies are required to provide appropriate access to persons with limited English proficiency:  
    - Clearly identifying the limitations inherent in the information dissemination product (e.g., possibility of errors, degree of reliability, and validity);  
    - Taking reasonable steps to remove the limitations inherent in the information; and  
    - Reconsider delivery of the information or services.  
| E-government Act of 2002                              | Law         | • Agencies are required to provide priorities and schedules for making government information available and accessible to the public.  
  - Inventories must be posted on Agency websites.  
  - The annual E-Government Act report to OMB must contain information on the final inventories, priorities, and schedules.  
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  - Compels agencies to comply with requirements of Section 508 of the Rehabilitation Act in all online activities.  
  - Agencies are required to implement and maintain an Information Dissemination Management System. |
Agencies share information by taking a page from Wikipedia.


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