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Information Governance and Public Engagement:

How U.S. Federal Department Policies are Addressing Social Media Records

By

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1.0 Introduction

Social media technologies serve important functions in support of government services in areas such as education, public relations, health and safety, and internal and external communication networks. For example, the National Aeronautics and Space Administration (NASA) has used Twitter to broadcast that the spacecraft Mars Phoenix had discovered water on Mars, the Transportation Security Administration (TSA) Evolution of Security blog has been used to provide travelers with useful tips and clarification regarding controversial incidents involving airport security, and the Library of Congress has used Flickr as a repository for over 3,000 public-domain, copyright-free photos so that all citizens may access and catalogue the content (GSA, 2009).

As the U.S. federal government is embracing “Government 2.0” and related open government initiatives, federal departments and agencies are making use of social media tools to share and exchange information with individuals and organizations that rely upon government services. As a result, federal agencies are increasingly generating essential government records within these technologies. Open government and records management are closely related; as the NARA Open Government Plan states, “The backbone of a transparent and accountable government is good records management. To put it simply, the Government cannot be accountable if it does not preserve – and cannot find – its records” (NARA, 2010a).

Accordingly, government records are required to be controlled pursuant to a number of legal and regulatory requirements that impact how records are managed, how long they must be retained, and, in the case of certain historical records, how they may be ultimately transferred for permanent archival retention. However, recent studies by NARA, the American Council for Technology & Industry Advisory Council (ACT&IAC), and the IBM Center for the Business of Government, all have cited serious deficiencies and challenges in current practices for managing social media records in the federal agencies (NARA 2010b; ACT&IAC, 2011; Franks, 2010). Each of these studies has recommended that policies and practice in the federal agencies be updated in order to ensure that essential records generated through social media technologies are retained and protected accordingly. In addition, NARA has developed specific policy guidance on managing Web 2.0 records within the federal government agencies (NARA, 2013). As social computing tools become increasingly integrated into government infrastructure, stakeholders must consider how existing records management policies can be expanded and extended in order to address social computing content, examine how government agencies review current practices in light of evolving social computing technologies, and provide guidance in policies to support the use of these technologies within federal departments and agencies. While the archival and records management literature has addressed the need for organizations to develop or update records management policies in order to better accommodate social media content, and several studies have recommended that federal executive branch departments update policies to better

address social media content, there has been no examination of the existing records management policies in the federal departments and agencies.

This study addresses that gap by examining how the executive branch departments are addressing records generated by social media by conducting a review of policies and practice related to social media across federal executive branch departments. The findings from this study, and the direction it provides for future research, will provide researchers, technologists, government officials, policymakers, and practitioners in the area of records and archives with a greater understanding of how records management policies in the U.S. federal government are addressing records generated by social media.

1.1 Significance of the study

This study is significant in that it addresses a critical gap in current understandings of how records are utilized in a federal government context. On a practical level, this study summarizes how federal government departments are utilizing records, implementing regulations regarding record-keeping, and interpreting existing policies with respect to social media. This study is also important in contributing to a shared understanding of how records, in the digital age, are used and preserved by government agencies. This understanding is vitally important because within government, records serve an additional and essential purpose, playing a foundational role in recording history and facilitating government transparency and accountability. In fact, “Records are the foundation of open government, supporting the principles of transparency, participation, and collaboration. Well-managed records can be used to assess the impact of programs, to improve business processes, and to share knowledge across the Government. Records protect the rights and interests of people, and hold officials accountable for their actions. Permanent records document our nation's history” (Obama, 2011). Given the importance of records, and records management, for government functioning, there is a significant need for current research to examine the practical implications of adopting social media, which can greatly facilitate government transparency and sharing of knowledge but which can also present additional issues regarding privacy, data storage, third-party ownership, retention and disposition.

2.0 Background

2.1 Information lifecycle and continuum models

Recordkeeping policies are often based in specific models, which influence overarching views of the nature and purpose of records and often shape policy approaches to their management. The information lifecycle model is widely regarded as the construct on which many United States records management technologies and applications are based. The lifecycle concept was pioneered by Schellenberg, who developed the lifecycle model to facilitate management of records from their “birth to death” (Schellenberg, 1956). The information lifecycle shows how information is managed through several “stages” starting from records creation and ending in final disposition (which includes destruction or archival preservation).

While there are number of variations and interpretations of the lifecycle model, the most prevalent module in use in the field of records management includes at least three distinct phases: (1) creation, (2) maintenance and use, and (3) disposition (NARA, 2000). One of the underlying assumptions of this model is that information does not naturally progress through the stages of the lifecycle. Information requires active management in a controlled and systematic manner. Each step of the lifecycle requires vigilance in order to preserve both the authenticity and reliability of the record (Duranti & Macneil, 1996).

The federal government long relied on a specific version of the information lifecycle model (see Figure 2), which also identifies creation, maintenance and use, and disposition as its phrases. On its website, NARA describes phases of the model thus: “**Creation:** A person or organization in the Federal Government produces or receives a record. **Maintenance and use:** While being used, the record is organized and stored with similar material. **Disposition:** A record is evaluated. The creator of a record proposes to the National Archives how long it should be kept. . . .Records schedules are set up to determine how long all Federal records are to be kept by the Government.” (NARA, 2015). NARA further elaborates, “All information has a lifecycle. Information is created, captured in some form, stored and ultimately destroyed or preserved indefinitely.” (NARA, 2015); information that is considered a record for federal government purposes is “placed under government control” during its lifecycle (NARA, 2015) and preserved or disposed of accordingly. This view permeates federal records management policy as disseminated by NARA and, also, is reflected in the Federal Records Act (2014).

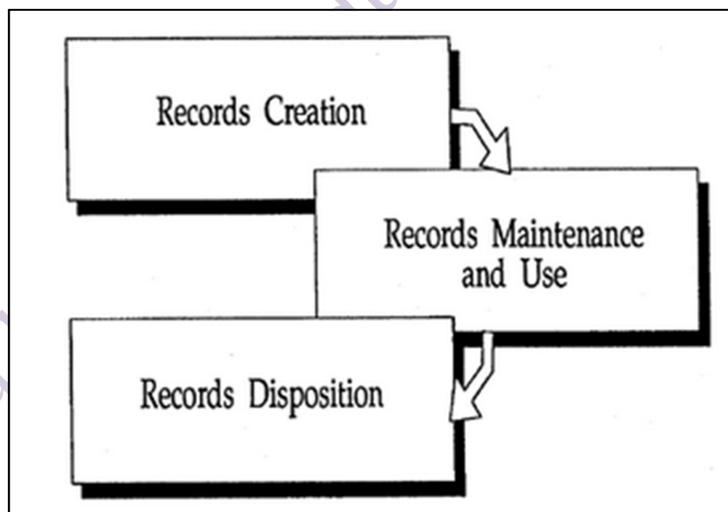


Figure 1. Federal Version of Information Lifecycle (taken from Disposition of Federal Records: A Records Management Handbook 2000 Web Edition)

Despite the fact that the lifecycle model is widely used within the records management community, especially in the United States, there have been critiques regarding application of this model within the electronic environment and viability of the mode due to new and changing technologies (Yusof & Chell, 2000). If the life cycle works well for paper-based records and

certain forms of electronic records, the continuum seems to be a promising model to manage electronic records because it “more appropriately reflects the characteristics of electronic records because of their capability to change form when technology is employed as the medium or carrier of information.” (Upward, 1996).

This continuum model, which focuses on phases rather than discrete steps, presents a significant paradigm shift for records management. Atherton proposes the transition from the records management lifecycle model, containing multiple phases (including the “records management” phase (creation, classification, use and disposition) followed by archival phase (acquisition, description, preservation and use), proposing a unified information for records management an archives phase consisting of four stages “creation, classification, scheduling, and maintenance and use” (Atherton, 1985).

In a continuum model, characteristics of the records, the recordkeeping system, and the ordering processes operate are seen as activities that are interconnected and transcend both space and through time (Upward, 1997). Upward explains further “the recordkeeping continuum is liable to be misinterpreted as a version of the life cycle concept simply because both encompass current recordkeeping processes. A continuum approach is very different conceptually, and in practical terms its impact upon electronic recordkeeping practices can be substantial. Approaches based on creation, maintenance and disposition refer to only some, not all, of the ordering processes involved in recordkeeping, and do not make up a continuum” (Upward, 1996).

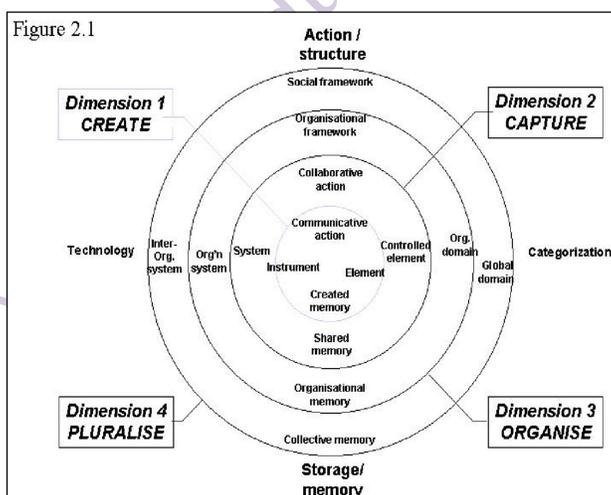


Figure 2. Upward's Information Continuum Model (Upward, 1997).

In applying the information continuum to social media, Bak provides additional support for adopting the information continuum in a rapidly changing, dynamic, and collaborative electronic environment. Bak identifies a number of challenges when applying the information lifecycle model to new technologies, such as social media. Specifically, Bak questions the concept of “creation” when an information resource can be created by “mashing” multiple data

sets, which may occur by degrees, may involve multiple collaborators, or may ultimately transform that resource into something entirely new. While the information lifecycle identifies a “disposition” phase, this may never actually occur in the electronic environment (Bak, 2010). As Bak points out, the information lifecycle model may have shortcomings when applied to digital content, and the continuum model may be more appropriate. However, as the lifecycle model is currently written into federal regulations and policy, there is a potential disconnect between the nature of digital technology, adopted with increasing frequency by federal agencies in the era of open government, and that lifecycle model.

2.2 Federal legal and regulatory recordkeeping requirements

There are a number of legal and regulatory recordkeeping requirements to which federal departments must adhere. The backbone of the federal recordkeeping system is based upon the Federal Records Act of 1950 (1976) and Presidential and Federal Records Act Amendments of 2014 (2014), defining records and establishing records management by federal agencies, the Federal Records Disposal Act of 1943 (2004) establishing the legal basis for the disposal of records of the United States Government. These laws provide the fundamental requirements for recordkeeping in federal departments and agencies.

Several related laws also impact the management of records in the federal government. A non-exhaustive list of such laws includes the Paperwork Reduction Act of 1980 (1995), establishing the legal basis for minimizing the cost of creation, collection, maintenance, use, dissemination, and disposition of information, the Freedom of Information Act of 1966 (1996) defining the types of records that are subject to disclosure and also outlines specific disclosure procedures, and the E-Government Act of 2002 (2002), aiming to improve citizen access to federal records through increased transparency. Finally, NARA Regulations (2009) provide policies that to federal agency to records management programs must comply with in order to ensure that records are records are created, maintained, and subject to disposition.

2.3 Definition of federal record

The federal government defines a record, in the Presidential and Federal Records Act Amendments of 2014: “(A) includes all recorded information, regardless of form or characteristics, made or received by a Federal agency under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the United States Government or because of the informational value of data in them” (Presidential and Federal Records Act Amendments, 2014).

While the definition of a federal record is codified in the Presidential and Federal Records Act Amendments of 2014 (2014), the interpretation of this definition is delegated to the United States Archivist. Specifically, “The Archivist's determination whether recorded information, regardless of whether it exists in physical, digital, or electronic form, is a record as defined in subsection (a) shall be binding on all Federal agencies” (2014). Significantly, the

amendment also transfers the authority for records management in the federal government from the GSA to NARA, a responsibility that was previously shared between the two agencies.

2.4 NARA definition of social media technologies

NARA has defined Web 2.0 and social media in three reports (1) *Guidance on Managing Social Media Records* (2014), (2) *A Report on Federal Web 2.0 Use and Record Value* (2010b), and (3) *NARA White Paper on Best Practices for the Capture of Social Media Records* (2013) (collectively referred to as the NARA social media guidance). These documents and other relevant guidance are included in Appendix A. The NARA definition from these reports states “Social media refers to the various activities integrating web technology, social interaction, and user-generated content. Social media includes blogs, wikis, social networks, photo libraries, virtual worlds, location-based services, and video sharing sites.” (NARA, 2014). These platforms support business processes that both create and manage content and can be used internally, externally, or both. NARA further provides a clause that can be included in standard General Services Administration (GSA) terms of service agreements (Appendix D) which holds contractors accountable for compliance with records management policies.

NARA’s guidance provides a non-exhaustive list of social media technologies, which includes:

- (1) **Web Publishing:** These are defined by NARA as “Platforms used to create, publish, and reuse content. Examples include microblogging (Twitter, Plurk), Blogs (WordPress, Blogger), wikis (Wikispaces, PBWiki), mashups (Google Maps, popurls).”
- (2) **Social Networking:** These are defined by NARA as “Platforms used to provide interactions and collaboration among users.” Examples include Social Networking tools (Facebook, LinkedIn), Social Bookmarks (Delicious, Digg), Virtual Worlds (Second Life, OpenSim), Crowdsourcing/Social Voting (IdeaScale, Chaordix).”
- (3) **File Sharing/Storage:** These are defined by NARA as “Platforms used to share files and host content storage. Examples include Photo Libraries (Flickr, Picasa), Video Sharing (YouTube, Vimeo), Storage (Google Docs, Drop.io), and Content Management (SharePoint, Drupal).”

For the purposes of this analysis, the term social media will be used to refer to the definition, description, and examples provided in NARA’s social media guidance.

2.4 U.S. federal reports and guidance on the management of social media records

Various forms of guidance have been issued by the Office of Management and Budget (OMB), Federal CIO Council, Government Accountability Office (GAO), and General Services Administration (GSA) and NARA (Appendix A). The OMB social media guidance states that “With social media and web-based interactive technologies, agencies should be aware that their activities may create new Federal information that will need to be managed like other component

agency information resources. For example, some uses of social media may present novel records management issues” (Sunstein, 2010). The GSA social media handbook states explicitly “When using electronic media, whether it is a blog, a website, a wiki, email, or any other type of electronic communications, the regulations that govern proper management, archival of records, and release (Freedom of Information Act) still apply” (GSA, 2009). The Federal CIO Council has issued guidance for agencies to direct their management of social media records, explaining that records management must be integrated into the management of social media tools (Federal CIO Council, 2009). The GAO guidance states that “once the need to preserve information as federal records has been established, mechanisms need to be put in place to capture such records and preserve them properly” (GAO, 2011).

In 2011, the White House issued a Presidential Memorandum specifically directing agencies to provide “current plans for improving or maintaining its records management program, particularly with respect to managing electronic records, including email and social media, deploying cloud based services or storage solutions, and meeting other records challenges” (Obama, 2011). In response to this memorandum, NARA has indicated that “[b]y December 31, 2013, NARA will produce a comprehensive plan in collaboration with its stakeholders to describe suitable approaches for the automated management of email, social media, and other types of digital record content, including advanced search techniques. The plan will detail expected outcomes and outline potential associated risks.” (NARA, 2012b).

The most detailed guidance on management of social media records has been published by NARA, most recently in response to the presidential memorandum. NARA first issued *A Report on Federal Web 2.0 Use and Record Value*, explaining the challenges faced by agencies in managing social media content based upon interviews and focus groups. (NARA, 2010b). Some of the challenges identified by NARA included the difficulty of managing records in a cloud computing environment using third party tools, lack of understanding surrounding what constitutes a record in a social computing environment, and the need to evaluate and update policies in the federal agencies in order to accommodate social media content (NARA, 2010b). This report indicated that agencies may use Web 2.0 tools to disseminate information that exists elsewhere, as a result, this information can potentially be seen to be duplicative and be largely considered to be “non-record” material (NARA, 2010b). While the report does identify that although much of the public content in Web 2.0 tools may be duplicative, it also indicated that the functionality of these tools may enhance the value of content to the component agency. For example, these tools allow for information to be presented or interpreted in different ways and comments may add to the contextual value (NARA, 2010b). The information may include the original post, as well as the additional metadata (such as comments or tags) associated with the post. For example, the report states:

When the Library of Congress solicits public comments and tagging of their images within an open, searchable database like Flickr, the value of the original content changes because there is additional context. Federal agency blog posts often link to other news releases, web sites, commentaries,

and sources, giving the information a context and structure beyond the actual words in the blog post. The content of a wiki without the software to run it would still be useful, but without metadata like change history, additional value may be lost.

Accordingly, user-generated metadata may add to the contextual value of the record. The report explains that it may be possible to preserve the content, properties, and value of this information apart for the application interface itself. An example of this is that it may be possible to preserve feeds in a micro-blogging platform, such as Twitter, apart from the original interface.

Particular strategies used by agencies to manage and preserve records are emerging as agencies become more familiar with records management requirements, particularly with respect to social media. Among the options identified for preserving records in NARA's report include "Saving all content with associated metadata as the complete record, using web crawling and software to store content or take snapshots of record content, using web capture tools to create local versions of sites and migrate content to other formats, using platform specific application programming interfaces (API) to pull record content as identified in the schedule, using RSS Feeds, aggregators, or manual methods to capture content, leveraging supporting specifications, services, data formats, and capabilities that underlie these web 2.0/social media platforms may provide generic functions that may be used to fix, capture, and manage record content" (NARA, 2010a).

A 2011 NARA self-assessment report (an annual assessment of records management programs in the federal government) indicated that there were some good examples of federal component agency management of social media records, stating "One component agency described an effective strategy they initiated to monitor records creation in their use of social media, an often difficult task considering how much is duplicative or posted simply for reference. The component agency convened an internal working group, including records management staff, to monitor their social media activity and develop a policy if, and when, records are created. Several other agencies said they have set up similar initiatives, also with records management participation, to determine gaps in policies. Others stated that records management staff monitor component agency use of social media." (NARA, 2012a).

NARA published an informative white paper in 2013 addressing best practices for the capture of social media records. This white paper cites a few examples of successful implementation of tools for capturing social media records and asserts that best practices include "methods, techniques or actions that allow agencies to capture complete social media records with associated metadata" (NARA, 2013). In fact, many available tools merely provide backup functions or compliance supports to users without specific records keeping functions or purposes (NARA, 2013). This white paper identified web crawlers as a potential tool for use in records management; however, it noted that such tools require higher levels of expertise and specific knowledge to deploy. The white paper describes a three-pronged approach for capture of records, including the following steps: "Building a foundation," "Tools and methods," and "Implementation." (NARA, 2013). In the first step, "Building a Foundation," agencies should

focus on identifying appropriate, knowledgeable stakeholders to form a working group on social media; should address policy concerns and “apply the definition of a Federal record” in making component agency-level decisions about social media content, and review existing schedules for retention “to determine if social media records are covered”. In the second step, “Tools and Methods,” agencies should focus on identifying and testing “available tools for social media capture” to see which ones are appropriate in terms of budget, functions, and staff expertise required. The document suggests leveraging the functions that some platforms have built in for export or document management. Transparency is noted as an important concept; NARA recommends considering open source and open Application Programming Interfaces when appropriate. Last, in “Implementation,” NARA recommends that agencies pay attention to language in their Terms of Service for social media tools and platforms and focus on training and staff roles and responsibilities. It is suggested that the component agency “provide centralized guidance from a team of records management and web staff” to ensure “standardization of processes” component agency-wide. Training for staff, and explicit delegation of responsibilities, is recommended; agencies are also asked to “share your lessons learned so that others in the ...government can benefit.” (NARA, 2013).

To provide additional specific direction to federal agencies, NARA also issued a document titled *Guidance on Managing Social Media Records* (NARA social media guidance) to federal agencies. This guidance explained that information generated in social media tools is likely a record, thereby requiring that federal agencies manage this content pursuant to their records management policies (NARA, 2014). The NARA guidance established a framework for helping federal agencies to determine if the content on social media sites should be considered records and managed accordingly. The NARA social media guidance directs agencies to ensure records management guidance is included in social media policies and procedures and recommends that staff and content creators partner to articulate clear processes, policies, and recordkeeping roles and responsibilities thereby ensuring social media records are identified and managed (NARA, 2014). NARA states that a framework of several questions can help to determine the record status of content in social media:

- 1) Does it contain evidence of an component agency's policies, business, mission, etc.?,
- 2) Is the information only available on the social media site?
- 3) Does the component agency use the tool to convey official component agency information?
- 4) Is there a business need for the information?

Based on this guidance, “if the answers to any of the above questions are yes, then the content is likely to be a Federal record.” (NARA, 2014). NARA also specifies that this list of questions is “non-exhaustive.”

The NARA guidance reinforces that both the original posting, as well as the associated metadata captured by the tool could, in certain cases, be considered record content, highlighting that social media can offer “added functionality, such as enhanced searchability, opportunities

for public comment, or other collaboration.” Further, the NARA guidance emphasizes that “a complete Federal record must have content, context, and structure along with associated metadata.” (NARA, 2014). As a result, agency records officers and social media managers are instructed to consider what social media content will be record material and should identify which components or features of the content should be captured (NARA, 2014). The guidance emphasizes that “[c]ontent on social media is likely a Federal record.” Some records may be temporary, while others may be permanent, a determination made after consideration of the questions identified above.

Changes by agencies in their social media practices may impact the records status and “value” of any information on social media; as a result, NARA recommends agencies continually review their use of social media and implementation of policies, including policies on capture of social media. Both temporary records and those slated for permanent retention must be captured appropriately and “should be exported from the social media platform into a component agency recordkeeping system.” While agencies may cease using a particular social media platform (or the platform itself may delete content or discontinue service), agencies must uphold their records-keeping responsibilities even if they discontinue use of that platform. Additionally, NARA mentions that social media “may include content... inconsistent with a component agency’s comment and posting policies,” such as spam, inappropriate comments, or other such content. Some of this content may be considered to be a non-record (NARA identifies spam as one example), but some may qualify as records. Agencies should “consult with their component agency counsel” to determine appropriate ways to handle such content, balancing obligations toward free speech, existing privacy policies, and component agency needs.

2.5 Records management and social media

The archival and records management literature has recognized that blogs, social networking applications, wikis, and micro-blogs should be managed pursuant to records management standards and best practices. (Bailey, 2008; Bailey, 2009; Barnes & Barnes, 2009; Cunningham & Wilkins, 2009; Dearstyne, 2007; Stuart & Bromage, 2010). The professional literature has also addressed the need to update records management policies in order to manage the unique and dynamic content those social media platforms provide. The topic of social media records has also been addressed in the legal literature with regard to admissibility of social media content in legal proceedings, pursuant to the requirements of the Federal Rules of Evidence (Schesser, 2006; Bernman, Nguyen, & Chrzan, 2009; Wilson, 2008). This provides further support of the legal value of social media content and of the potential for such content to serve as a record in the event of litigation.

Several studies have examined the technical and policy-based issues and challenges related to the capture and preservation of social media. McCown & Nelson specifically address the intriguing question, “What happens when Facebook is gone?” citing examples of technologies that have disappeared over the last few years such as Yahoo Mash, Yahoo Photos, and Google Lively (McCown & Nelson, 2009). In each case, the service provider ended the service and related user data was lost as a result. McCowan & Nelson conclude, “One may only

speculate how many web services would be terminated in a Microsoft-Yahoo merger. Even websites designed for archiving the Web are not guaranteed to persist, especially in today's increasingly harsh economic climate which may force a number of Web 2.0 websites out of existence." (McCown & Nelson, 2009). This study was one of the first efforts to examine the problem of archiving Facebook accounts and to propose possible technical solutions. Larger challenges in archiving social media were explored by Salaheldeen & Nelson (2012), who found that 11% of social media records were lost within a year of their creation.

While social media presents challenges for the capture and preservation of records (Sullivan, 2005; Salaheldeen & Nelson, 2012), both Bailey and Cox have provided several intriguing alternatives for addressing these challenges going forward. Bailey explains that in the social media environment it may be possible for the user community to play a role in "collectively identifying" the value and properties of records generated and stored in social media technologies. In this paradigm, Bailey sees records retention and description as determined "in part" by users within general boundaries defined by the records manager. In addition, Bailey recommends that in order to address records management requirements in social media environments, a "detailed, complex and fluid" model is needed. Cox presents another user-based alternative to managing complex digital content, suggesting that the preservation of complex digital materials may be accomplished by leveraging the "Citizen Archivist" for Digital Curation projects. While not specifically addressing social media, Cox has speculated that "new networked digital technologies have pushed archivists, at least some, to rethink the custodial model and to consider new kinds of distributed or post-custodial strategies" (Cox, 2009).

2.6 Federal government management and use of electronic records and social media

Records management has served an important role in support of the delivery of government services, providing evidence of the government transactions and legal and regulatory obligations (NARA, 2010a). The importance of managing information helps to ensure the effective and efficient management within the government, as well as to promote and provide evidence of important transactions and documentation of essential services (Cuillier & Piotrowski, 2009). Many of the records generated throughout the federal government may possess historical value, and are necessary to secure the rights and privileges of U.S. citizenship (NARA, 2010a). As legal and regulatory requirements have clarified the need for the federal government to control both electronic and non-electronic information, this has posed a new set of challenges with regard to changing in technologies that generate records that are required to be controlled through the information lifecycle (Rawlings-Milton, 2000; Perritt Jr., 1992; Plocher, 1999; Van Wingen, 1999; Sprehe, 1992).

The federal government has incorporated electronic records management into their information technology infrastructure and practices, posing both opportunities and challenges with regard to ensuring greater accessibility of government information (Plocher, 1999; Van Wingen, 1999). In particular, the volume of electronic information generated by the U.S. federal government, in addition to the lack of the funding, resources, and awareness necessary to enable

effective records management in a diverse environment, have posed significant challenges with regard to managing electronic records throughout the federal agencies (Rawlings-Milton, 2000).

Increasingly, federal agencies have adopted the use of social media to efficiently provide services and communicate with a larger group of people. The U.S. federal government is currently making use of social media tools such as social networking sites, virtual worlds, blogs, wikis, and mini-blogs, as a way to effectively communicate and interact with those that rely on government services, and communicate important information (McClure, 2010; Meijer and Thaens, 2010; GSA, 2009). Both e-government and open government initiatives have been used in conjunction with social media in order to increase transparency throughout the government (Brito, 2009). The use of social media technologies has the potential to provide an efficient way to support the goals of transparency and openness in the way that the government provides access to information regarding important government services (Bertot, Jaeger, et. al, 2010; Bertot, Jaeger, et. al, 2009). These tools provide highly interactive and dynamic means by which individuals can interact with government officials, administrators, and policy makers and access information about government services and initiatives.

U.S. federal government social media use and records management policies have been examined through several studies in the literature. In one literature review, the complexities and challenges of managing social media records are identified, as well as the need to update policies for managing social media content through the agencies (Grimes, 2009). Another literature review provides an overview and annotated bibliography on social media and records issues, describing resources and standards related to the management of social media records (Shaffer, 2012). A study examining federal agency records management identified issues related to inclusion of social media content in these policies, and presented policy recommendations for federal agencies seeking to update policies to address social media records (Doran, 2012). The literature has raised issues specifically about the ways in which externally hosted “third-party” social media sites have applied records schedules, as well as methods for archiving and preservation of content for permanent access and retrieval (Bertot, Jaeger, & Hansen, 2012).

Several studies have specifically addressed the management of social media records in federal agencies by conducting interviews with agency officials. These studies have also examined the challenges related to the management of records in social media in federal agencies and provided specific recommendations for effective practices (Doran 2012; ACT&IAC, 2011; Franks, 2010). The challenges identified include: lack of policies addressing social media records, uncertainty about what constitutes a record in a social media environment, difficulty capturing social media records for management in electronic recordkeeping applications, and difficulty controlling information within third party applications or cloud computing environments. Each of these studies has recommended that policies, technology, and practice in the federal agencies be updated in order to ensure that these essential records generated through social media technologies are retained and protected accordingly.

One continuing challenge, identified throughout the literature, is that department records may reside on third-party social media platforms that are potentially outside of the control of the federal government (Bertot, Jaeger, & Hansen, 2012; ACT&IAC, 2011; Franks, 2010). This content may be subject to the constantly evolving policies of the service providers, causing concern about whether this content will be available and accessible in the future. This challenge is further exacerbated without automated methods or sophisticated tools to capture social media records so that they can be stored and managed internally. Writing in *American Archivist* in 2014, Arnold and Sampson addressed the use of some such tools, describing the use of Twitter's Application Programming Interface (API) to gather tweets from the 2011 Egyptian revolution. The authors describe particular challenges related to use of API and other such tools, including "determining the scope of collection, quantitative and qualitative collection methods, separating signal from noise, and navigating vernacular and formal languages" (Arnold and Sampson, 2014). The authors also discuss guidelines for best practices for using sophisticated tools to gather and preserve social media records.

A growing body of research has examined the use of sophisticated social media technologies in government, responding in large part to the 2011 Presidential Memorandum on Managing Government Records. Federal executive branch departments have grappled not only with best practices for collecting and preserving social media records, but also with more basic questions of what technologies to utilize and how to do so. Mergel (2013a) interviewed social media directors across government agencies and determined that their decisions were largely driven by informally-gathered information about best practice, observations from public and private sector, and information about public needs or "citizen behavior." As a result, Mergel recommends greater use of "formalized knowledge sharing" among personnel adopting and implementing social media technologies in order to support their effective use in government. Snead (2013) also conducted a qualitative examination of social media use in the executive agencies, finding that "most agencies" use at least some forms of social media. While participation varies from agency to agency, there is an increased trend of public interaction with agencies based on the recent adoption of social media and the move toward greater "transparency".

2.7 Summary

This section has reviewed the available literature regarding records management and social media, particularly with respect to government agencies. Based upon the literature, it is clear that the management and preservation of social media records is an important and challenging issue for federal departments and agencies to address.

While there exists, in the literature, an examination, via interviews, of the management of social media content in the federal agencies, a close analysis of federal policy and social media use is needed to identify how federal guidance is being practically applied within federal departments and agencies, a topic which has not been examined in the literature. Such an analysis is important to the field because of its potential to identify key elements and challenges, as well as different approaches for applying the guidance in practice.

3.0 Methods

In order to better understand how federal executive branch departments are addressing social media records through the use of policy, a thematic analysis of websites and department policies was performed by examining executive agency records management policies and supporting data contained in Department websites.

3.1 Goals and research questions

The goals of this analysis were 1) to better understand the practices of federal departments regarding social media records use and related issues, including technology as well as policy and federal guidance; 2) to examine those issues in light of management and preservation practices for social media; and 3) to develop an understanding of how these practices relate to current information models and records management theories. The purpose of the study was to answer the following research questions:

- RQ1. How are federal departments using external social media technologies?
- RQ2. How are federal department records management polices addressing social media content?
- RQ3. How are federal department social media policies addressing records management requirements?

3.2 Selection criteria

Policies examined in this analysis included each department's records management policies, social media policies and related guidance. The records management policies of the Legislative and Judicial Branch departments and agencies were not reviewed as part of this study, as they are subject to different legal and regulatory requirements. Future research should be conducted in order to examine such policies. In addition to policies, websites were reviewed using a consistent framework to evaluate the department's use of social media.

3.3 Data collection and analysis

All federal executive branch departments were included in this study, although independent agencies (such as NASA) were not included (see Appendix B for list of included departments). Nor were component agencies housed within executive branch departments (e.g., the Bureau of Prisons at the Department of Justice). The researcher reviewed content posted on each department website to find departmental policy documents governing social media use and records management policy. The researcher also searched each department's web presence for social media use, including links to Facebook, Twitter and other social media providers. To identify policies and social media links, consistent search terms were used on department website search engines if these elements were not readily available from the homepage. These search terms included: records management, records, social media, and policy.

Data analysis utilized a quantitative analysis component as well as qualitative thematic analysis (Strauss and Corbin, 2008). Information about departmental use of social media was compiled and tabulated in order to gather frequency and utilization data. Then, the policies were collected and reviewed and coded for thematic elements. In order to determine the nature and content of component agency records management policies, the researcher conducted content analysis (Powell & Connaway, 2004) on each policy using a qualitative thematic approach (Creswell, 2009).

In cataloguing types of social media used by each department, the researcher chose to represent the data in a table, which summarizes tools used by each federal department. As a result, this website analysis provides both quantitative data regarding the types of social media utilized across this entire component agency and, also, more qualitative data that captures the variability in the ways that different components leverage and manage social media.

3.4 Limitations

There are several limitations of the study. The methods include reviewing policies on the websites that are posted and made available to the public through department websites; while there are few departments and agencies which did not post policies in their entirety, those policies or policy elements not posted on websites are not part of this study. The degree to which supplemental policies and procedures and additional information are made available internally within each federal department and agency was also not captured in the study. Additionally, it is acknowledged that policies posted on department websites may not be current, may be in the process of internal revision, or may be revised significantly in the future. Finally, the scope of this study does not extend to the actual implementation of policy. Additional research is needed in order to determine how the policies are being implemented and enforced in practice.

4.0 Results

4.1 Review of social media use and related policies

The following section summarizes and analyzes publicly available social media use, social media policies, and records management policies in federal executive departments. Data is presented in table form with department-specific trends and analysis following.

Department	Social Media Use													
														
State	✓	✓	✓	✓	✓	✓	✓	✓	✓					
Treasury	✓	✓	✓			✓			✓					
Justice	✓	✓	✓	✓					✓					
Interior	✓	✓			✓		✓			✓				
Agriculture	✓	✓	✓					✓	✓					

Commerce	✓	✓	✓			✓		✓			✓			
Labor	✓	✓	✓		✓	✓	✓	✓	✓	✓				
Defense	✓	✓	✓		✓	✓	✓	✓	✓	✓				
Health & Human Services	✓	✓	✓			✓		✓		✓				
Housing & Urban Development	✓	✓	✓			✓	✓			✓				
Transportation	✓	✓	✓			✓		✓		✓		✓		
Energy	✓	✓	✓			✓	✓	✓	✓		✓			
Education	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	
Veterans Affairs	✓	✓	✓			✓			✓					
Homeland Security	✓	✓	✓			✓	✓		✓	✓				✓

Table 1: Department social media use

Icon	Social Media Name	Icon	Social Media Name
	Facebook		Instagram
	Twitter		Google Plus
	You tube		Blog
	Podcast		Pinterest
	Tumblr		LinkedIn
	Flickr		Vine
	Storify		Ideascale

Department	Policy References	Policy Comments
State	Using Social Media U.S. Department of State Foreign Affairs Manual Volume 5—Information Management	Contains detailed procedures (including roles and responsibilities) to address retention requirements regarding the management and preservation of social media records. Provides specific guidance on the types of record material contained in the sites.
Treasury	Department of the Treasury 2011-2012 Privacy Report to Congress	The Treasury 2011-2012 privacy report to congress states that OCIO planned to draft a policy “to provide Treasury-wide guidance on social media to ensure official use complies with privacy, records management, and

	Department of Treasury Open Government Plan	information security requirements.” Treasury Directive TD 25-20, Ensuring Compliance with Privacy and Records Management Requirements using social media websites (not publically available)
Justice	Request for Disposition Authority for Social Media (Web 2.0) Applications	Contains detailed retention requirements regarding the management and preservation of social media records in various tools.
Interior	DOI Social Media Policy DOI Social Media Guidebook	Restates NARA guidance regarding the requirement to manage social media records. Directs staff to work with the bureau records management office to determine how content posted on social networking sites and the comments submitted as responses should be managed as Federal records.
Agriculture	Department Regulation on Records Management	Records management policy specifically addresses social media requirements to “Accurately and completely make and preserve records, in any medium (includes social media)” and “Establish effective management controls over the creation, maintenance, and use and disposition of Federal records in any medium such as: paper, electronic (including social media) and microform media, throughout their life cycle.” Assigns responsibility to Social media site sponsors are for identification of the record material contained therein, and the proper archiving of that material in accordance with approved record disposition schedules. Provides specific guidance on the types of record material contained in the sites.

Commerce	U.S. Department of Commerce Policy on the Approval and Use of Social Media U.S Department of Commerce Records Management Policy	<p>Contains detailed procedures (including roles and responsibilities, development of SOPs, providing training, and working with NARA to identify a retention schedule) to address retention requirements regarding the management and preservation of social media records.</p>
Labor	Department of Labor Records Management Policy	<p>DOL records management policy does not reference social media. Policy references other forms of media (such as email) and instructs staff to use “print-to-file” or “click and save” approach for management of electronic records.</p> <p>DOL Social Media Policy (not accessible)</p>
Defense	Directive on Responsible and Effective Use of Internet-based Capabilities	<p>States that internet-based capabilities “used to transact business” are subject to records management policy and all users of these Internet-based capabilities must be aware of the potential record value of their content, “including content that may originate outside the agency”.</p> <p>More specific guidance provided in agency policies and procedures.</p>
Health and Human Services	Social Media Policies Checklist Web Records Policy and Guidance Social Media Policies	<p>Contains detailed procedures and retention requirements regarding the management and preservation of social media records.</p> <p>Checklist requires staff to contact their records official to determine appropriate records schedule and records management practices.</p>
Housing and Urban Development	Departmental Policies and Procedures for Use of Social Media Sites by HUD Staff	<p>Social media policy requires that a statement of record retention be posted on social media sites.</p> <p>Ex: “This is the HUD page on Facebook. Comments posted on and messages received through HUD pages are considered Federal records and shall be archived. Please</p>

		see NARA’s General Records Schedules, in particular Section 20 on electronic records.”
Transportation	Departmental Web-based Interactive Technologies Policy	<p>Contains detailed procedures (including roles and responsibilities, development of SOPs, providing training, and working with NARA to identify a retention schedule) to address retention requirements regarding the management and preservation of social media records.</p> <p>Social media policy states “information that meets the definition of a Federal record and is disseminated via any electronic method (i.e., e-mail, electronic bulletin board, social media Web site, blog, or other online system) must be documented in an official DOT recordkeeping system and retained and disposed of, or permanently preserved, in accordance with records schedules that have been approved by the National Archives and Records Administration (NARA).” Further “If information that is identified as a Federal record does not have an applicable records schedule, then the content owner must notify the business unit records management staff.”</p>
Energy	Records Management Program Order Social Media Records and You	<p>Inconsistent guidance.</p> <p>Record Management Program Order (2013) states that “Use of Instant Messaging (IM), text messages, and public/external social media platforms for official business resulting in the creation of agency records is prohibited. Therefore, identification and retention of instant messages, text messages, and other public social media communication is not required.”</p> <p>The informative Social Media Records chart explicitly states that “in using social media, records are created or received”.</p>
Education	Records and Information Management Program Directive	<p>Provides general reference to NARA guidance on the requirement to manage social media records.</p> <p>Guidance documents “are incorporated by reference in this Directive, and are binding upon POs records management programs. Guidance documents already</p>

		issued include vital records, social media records, and records management in cloud computing environments.”
Veterans Affairs	Use of Web-Based Collaboration Technologies	Contains detailed procedures (including roles and responsibilities) regarding the management and preservation of social media records.
Homeland Security	Use of Social Networking Interactions and Applications Communications/Outreach/Public Dialogue Use of Unidirectional Social Media Applications Communications/Outreach/Public Dialogue	Provides general reference to NARA guidance on the requirement to manage social media records. Identifies department social media records are retained “indefinitely” until records schedule is approved. Provides mitigation approach that recommends posting notice that content posted on a social networking website or application or sent to the Department in connection with the transaction of public business, may become a federal record and if so the Department is required to maintain a copy per its records retention policies.

Table 2. Review of Department Social Media and Policy

4.2 Use and capture of social media

The review of Department websites departments were involved with some form of social media; all departments linked to at least four different applications. Facebook, Twitter and YouTube were adopted across all agencies. Technologies such as Google Plus, Flickr, and Instagram were adopted by more than half of the departments reviewed. Lesser-used platforms, used at fewer than three agencies, included Vine, Storify, LinkedIn, and Ideascale.

Policies varied, also, in the level of specificity with which specific social media platforms were referenced. The majority of policies and supplemental information documents did not reference specific technologies but rather contained generalities applicable to multiple forms of social media. Some policies did reference specific technologies, retention timeframes, and best practices for specific platforms. One such detailed approach, for example, is found in the DOJ NARA approved Records Control Schedule that is applicable to “Social Media (Web 2.0) Applications”. The schedule is not “media neutral”, as the records are scheduled by the type of social media application, rather than the content of the records stored in the social media application. The specific social networking sites that are scheduled include “Facebook Page (or similar)”, “YouTube Videos”, and “Twitter”. The “Facebook Page (or similar)” is maintained as a temporary record to be destroyed/deleted one year after the end of the Presidential Administration. YouTube videos are maintained pursuant to existing retention schedules.

Finally, “Twitter” content is scheduled as a non-record that may be destroyed/deleted when no longer needed. The schedule specifically identifies “Web Logs (Blogs)” hosted on DOJ servers as scheduled for “permanent retention” to be transferred to the National Archives one year after the end of the Presidential Administration.

The Department of Energy (DOE) included guidance on “best practices for Facebook, Flickr, Twitter and YouTube,” although this guidance did not address recordkeeping issues or implications. In some cases, extensive discussion of social media was included, including formatting, administration, and content generation, but records management issues or practices were not addressed specifically as part of these “best practices.”

Two departments (using identical wording) have specifically identified, in their policies, the types of record content typically stored or generated in social media applications, including “Entries, comments, blog posts, links, videos, and other social media communications” and “Site management and operations records including design, policy and procedures, and other web management records” (State and Agriculture). This guidance assists site owners and records officers with appropriately addressing content required for retention, disposition and preservation.

The way in which the policies addressed capture of social media records varied greatly among the federal departments, with some specifically addressing the technology used to generate and manage content, some policies remaining media-neutral, and some addressing a manual process for managing electronic records in paper form. Department or agency policies typically contained specific sections identifying the management of email content and describing different approaches of managing email as a record. Other issues addressed in policy included the storage media used to transfer records to NARA, as well as systems used to manage and generate information in the agencies.

An excerpt of policy that specifically provides guidance on the management of social media records within their policy document was the State Department Policy below:

Records in social media sites must be copied or otherwise captured and maintained with related records, unless the site has a record management application that can manage the records throughout its lifecycle. Nonrecord content consisting of duplicate information which is maintained in other department recordkeeping systems (original recordkeeping copy is maintained in accordance with its records disposition schedule), and transitory records do not need to be archived and may be deleted when no longer needed. (State Department)

The Department of Agriculture references NARA guidance and disposition schedules with regard to the capture of social media records: “Capture and manage records created or received via social media platforms, including Web sites and portals. Capture and preserve such

records in accordance with NARA-approved disposition schedules and USDA approved guidance.” (Agriculture). Similarly, the DVA social media policy references requirements but also includes detailed roles and responsibilities for DVA Records Officers, stating that they should “(1) Work with content owners to ensure that all records generated through the use of Web-based collaboration tools adhere and conform to all documentation contained in the applicable RCS; and (2) Work with the Archivist of the United States and VA content owners to determine the most appropriate method(s) to capture and retain VA records on both Federal servers and VA activities hosted on non-Federal Web-based collaboration hosts”.

Both DOI and DOJ address the approaches toward capture of records stored on third-party servers. DOI states that “DOI users, working with the Records Management Officer, determine the most appropriate methods to capture and retain records on both government servers and technologies hosted on non-Federal hosts. The National Archives and Records Administration offers resources and guidance to agencies to ensure proper records management.” For DOJ, a NARA approved retention schedule describes the approach for management of “Social Networking Sites” hosted on external servers, explaining:

The Department of Justice does not manage the content on these public servers. Department of Justice content is created, saved, and then posted to these sites. This section applies to the content saved and maintained by DOJ/PAO Staff in DOJ recordkeeping systems.

A lesser-used approach is represented by the Department of Labor, which relies on either “print-to-file” or “click-to-save” methods for managing electronic information (Figure 3). As indicated in Figure 3, the policy directs that users either print all electronic material and file it in hard copy form or manually save to an electronic records management system. This policy does not address social media, or specific technologies, explicitly although it can be assumed that social media falls under electronic “documents.”

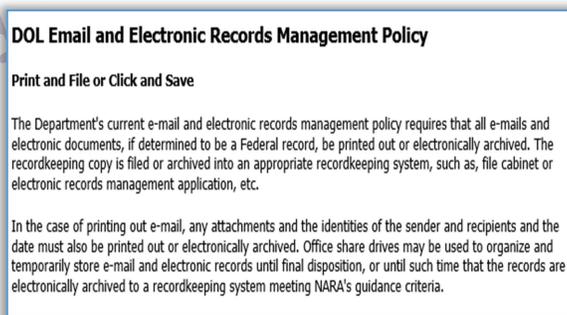


Figure 3. Review of Department Social Media and Policy

Finally, some department policies or guidance did not reference social media capture or archiving in any way, treating the management of electronic information in a general manner.

Example of such a policy was found in the Department of Education and Department of Treasury records management policy.

4.3 Policy approaches

4.3.1 Level of policy detail

The federal department policies examined in this study contained a widely divergent level of detail, with policies ranging from extremely broad documents, with little specific guidance on managing the information within the agency, to much more detailed and specific guidance. Broadly framed policies tended to be brief, containing a high-level, limited overview of electronic records management practices and procedures. For those policies, it was unclear if additional non-public facing information provided further guidance to those within the agency. In broadly framed policies, the specific details of the policy implementation and oversight of the policy were typically not included.

Other policies addressing electronic records management were very detailed, spanning several sections of the document. These policies tended to include subsections or supporting manuals, addressing issues of technology, details involving of enforcement and oversight of the policies, and roles of individuals responsible for implementing the policy. In these detailed policies, the specific means of ensuring adherence and compliance with the policy was also typically included. In the case of the State Department, for example, there was a detailed social media policy containing guidance and practices for management of social media records.

Detailed policies also typically contained specific references to related guidance, as well as legal and regulatory requirements. If the guidance or legal requirements were included in the specific policy, the references were limited to the last date of the update of the policy. An example of such references to legal requirements and guidance from the Department of Commerce (DOC) is found in Figure 4. In this example, the policy makes detailed reference to multiple sources of guidance, including regulations, NARA guidance, and DOC documents. However, the policy does not itself contain or refer to the most updated NARA guidance on managing social media. This is a clear example of the challenges departments face in aligning technology and policy in a rapidly evolving environment.

How should Social Media and Web records be managed?

"Managing Web records properly is essential to effective Web site operations, especially the mitigation of the risks an agency faces by using the Web to carry out agency business," states the "NARA Guidance on Managing Web Records." Issued in January 2005, the NARA Guidance discusses various aspects of managing Web records, including the legal and regulatory framework, risk and risk assessment, managing Web site content, and developing disposition schedules for Web records.

The Guidance advises Webmasters and RMOs to use their agency information technology system risk assessments to establish records management controls on Web records. Agencies should conduct a risk assessment of records management-related threats to their Web sites and the consequences of compromised records.

Figure 4. Excerpt from DOC policy on management of social media records

Policies also vary in their reference to roles, responsibilities, and external guidance. The Interior, State, Transportation, and Veterans' Affairs departments, direct staff to work with the departmental records management office to determine how content posted on social networking sites and the comments submitted as responses should be managed as Federal records. The Department of Veterans' Affairs (DVA) social media policy provides detailed roles and responsibilities regarding the management of social media stating that "Web-based collaboration tools must also meet standard records retention and e-discovery requirements as mandated by law". (DVA). The Department of Transportation (DOT) social media policy contains detailed procedures (including roles and responsibilities, development of SOPs, training requirements, and working with NARA to identify a retention schedule) to address retention requirements regarding the management and preservation of social media records. The policy explicitly states "information that meets the definition of a Federal record and is disseminated via any electronic method (i.e., e-mail, electronic bulletin board, social media Web site, blog, or other online system) must be documented in an official DOT recordkeeping system and retained and disposed of, or permanently preserved, in accordance with records schedules that have been approved by the National Archives and Records Administration (NARA)." Further "If information that is identified as a Federal record does not have an applicable records schedule, then the content owner must notify the business unit records management staff."

4.3.2 Frequency of policy update

The second area identified through the analysis was the frequency with which the policies are updated and the length of time until the next scheduled update. When dealing with the management of records within new technologies, it became evident that the frequency of update impacted the ability of the agency to address social media content within the policy. The analysis revealed that the departments and agencies varied widely in their approaches to policy updates, based upon changes to the technological, legal, and regulatory requirements, as well as changes to current records management practices.

The range of the last records management policy updates varied from 1989 to 2013. One of the oldest policies was the Department of Housing and Urban Development's manual "Overview of Records Disposition Management Program" listed as last updated in 1989. One of the most recently updated policies, in contrast, was the Department of Energy's "Records Management Program Order", last updated in 2013. As a limitation of the study, it was unclear whether more current policies existed outside of the information that was publicly available on their agency websites, though it should be noted that agencies have been encouraged to comply with transparency mandates by making recent policy updates available online wherever possible (NARA, 2010).

Depending on the particular department, it is clear that there are widely different approaches towards the need to frequently update the records management policies. While certain policies had a schedule for review specified, others were unclear as to when the next review would take place. Departments or agencies varied widely in the level of specificity provided about what might trigger the need for review and update of policies. For example,

DOE's policy below clearly stated both the effective date of the policy. In some cases, such as the Department of Homeland Security (Figure 5) and Treasury Department, the approval date was not included on the policy, making it difficult to determine the last update in order to know whether the information was the most current and accessible version available. No date for expiration, update or review was provided.

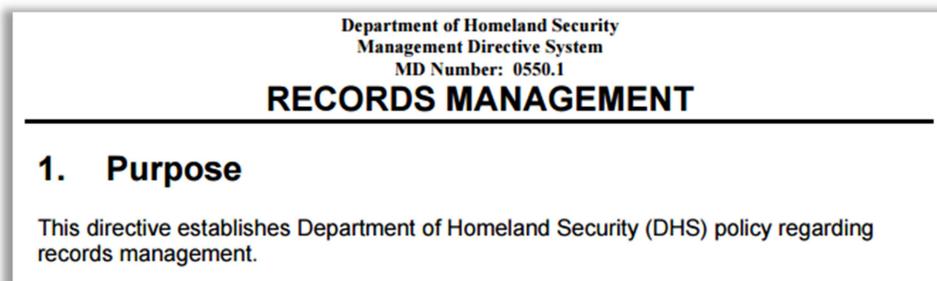


Figure 5. Excerpt from Homeland Security policy with no approval date listed

Finally, in some cases, it was clearly indicated that policies were being developed, but not yet published. This was true in the case of the Treasury Department, where a report to congress states that OCIO planned to draft a policy “to provide Treasury-wide guidance on social media to ensure official use complies with privacy, records management, and information security requirements.” (2012). As a result, policies that were undergoing revision or unpublished, the level of detail of such policies was impossible to ascertain.

4.3.3 Inclusion of supplemental information and guidance

An important and unexpected finding was that there was often important supplemental information that was included in the records management section of the agency website which may not constitute official policy, but did typically provide additional descriptive information on the department or agency website. The amount of supplemental information varied, with some websites containing multiple sections with detailed explanations of policies, and other websites, providing very little additional information. The information on the websites included training materials, information regarding responsibilities of agency records managers, and other explanatory information that is typically not included in the formal policy documents. Other types of supplementary information included references to related guidance, such as guidance from NARA, as well as legal and regulatory requirements governing their records management policies.

For example, the HHS Social Media Policies Checklist (Figure 6) requires staff planning to use social media to acknowledge that they are taking the appropriate steps to must follow the current laws and standards that govern information and information technology:

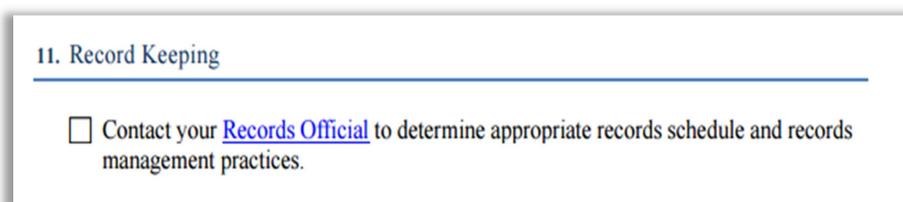


Figure 6. Excerpt from HHS Social Media Policies Checklist on Record Keeping

In some cases it was not always clear where the formal records management policy ended and where the supplemental information began. This was the case where the policies were included as text in the website, rather than a distinct document. Often the existence of supplemental information on the department or agency website provided a better understanding of how the records policy and technology was being implemented in practice within the agencies. Below, the Department of Energy (DOE) policy (Figure 7) is supplemented by additional instructions, including visuals, a flowchart, and a checklist delineating steps for the user in managing social media records.



Figure 7. DOE charts on managing social media.

Some departments such as DOE specifically reference technologies such as Facebook and Twitter in guidance regarding social media use. A number of department and agency websites linked directly to NARA, which provides users the opportunity to go directly to NARA's website, publications, and guidance for recent updates. However, as stated above, policies often linked to superseded guidance, which could be confusing to department staff.

In summary, departments vary in the level of detail provided and in their referencing of specific social media technologies, but consistently, departments make use of supplemental information to provide updates and implementation details that may not be appropriate for inclusion in existing records management policies.

5.0 Discussion and Recommendations

5.1 Characteristics and trends across policies

Overall, the policies contained a wide range of formats, details, and approaches to managing social media records in federal agencies. At a minimum, each of the department policies did address social media records in either the records management policy, social media policy, or supporting information contained on the agency records office website. The approach was not consistent among departments, with some departments providing detailed guidance in records management policies, some providing guidance in social media policies, and others providing such guidance within their formal records management policy, as well as outside of formal policies.

5.2 Framework for understanding records management policies and social media

Based upon the analysis above, it is possible to formulate a framework describing how federal agency records management policies address social media content and the related NARA guidance. This framework (Figure 8) is broken up into four quadrants, representing the relationship between the level of detail of federal agency records management policies and the frequency of update.

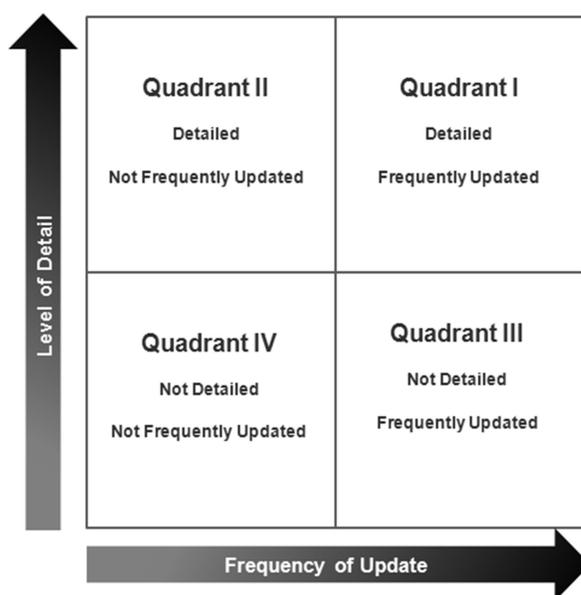


Figure 8. Records Management Policy Quadrants for Social Media

Records management policies that are situated in Quadrant I are very likely to address both social media content as well as the NARA and other federal guidance. This is due to the fact that the level of detail and recent updates allow the policy to address specific details of new technologies, as well as the most recent guidance. Since they possess the weight of official policy, this is the most effective approach, though the approach may be more difficult to

maintain over time. For policies situated in Quadrant III, the existence or non-existence of recently updated supplemental information is an essential factor in determining the effectiveness of the policy in addressing social media content.

Conversely, policies in Quadrant II are less effective because they only address the management of certain technologies prevalent at the time of the initial publication or last revision (such as e-mail systems), while newer (and potentially more prevalent) technologies are not addressed. There is little in the way of supplemental information that can remedy these policies, since they may contain obsolete and potentially misleading information regarding the management of technology. Similarly, it is incredibly difficult for policies in Quadrant IV to address social media content and the NARA guidance without having to include a significant amount of supplemental information in order to provide the level of detail necessary to make the policy useful and accessible to staff in the agency. This may also not be an ideal approach, since a large amount of supplemental information would need to exist outside of the formal policy, which would be difficult to control and oversee.

5.3 Policy challenges

The first issue identified through this analysis is that agency policies often chose to address the management of social media technologies without identifying how specific technologies should be managed. For example, methods for capturing, maintaining, retaining and preserving records of virtual worlds (such as Second Life), are much different from that of micro-blog records (such as Twitter). These differences require these technologies to be addressed separately, as the management of such information may require the use of different methods for managing the information. The primary reason that these technologies have been addressed together is likely due to the rapid development of specific technologies and because detailed guidance on is not yet well developed.

Second, department and agency attempts to cite specific legal and regulatory recordkeeping requirements, as well as related guidance, were often ineffective or potentially misleading. Typically, these references were alluded to in a generally, were not comprehensive, contained outdated information, or were not included in the policy at all. This may be occurring for a variety of reasons, such as the lack of awareness of the relevant information, or policies that have not been recently updated to include such information. When this information is included in actual policy, the policy may need to be updated more frequently in order to incorporate the relevant legal and regulatory requirements and guidance. This is especially important for policies addressing technologies such as social media, due of the speed of which these technologies change and are being adopted by agencies.

Third, both records management and social media policies largely failed to address the policies and procedures for managing social media records hosted by third parties. Due to the fact that these technologies are outside of the control of the organization, the risks associated with management of government records in these technologies is a significant issue that requires detailed policy guidance to ensure that agency records are effectively protected from

unauthorized access, destruction or modification. Since third parties may have their own information retention policies or may not adequately adhere to agency retention requirements, it may require negotiation of terms in a service level agreement, as well as awareness of this issue among agency staff.

5.4 Implications for policy and theory

In considering how policy and practice must evolve to incorporate new technology, as these policies and guidance documents attempt to do, it is also to consider how the field of records management interfaces with our national understanding of government. As described earlier, the principal roles of records management, with respect to government, are widely acknowledged to relate to recording history and fostering government transparency and accountability. The shift to digital records and the growing use of social media by government agencies, taken together, pose questions as to whether current practices are capturing important information with fidelity, accurately reflecting history, and complying with existing regulations.

It is evident that there are considerable challenges, in terms of theory as well as practice, in integrating the information lifecycle model with current practices for using, managing and preserving social media records. The discrete phases of the lifecycle model, such as creation, maintenance and use, and disposition, cannot always be applied with certainty to the more dynamic and ambiguous nature of social media records, where “creation”, for example, may occur at multiple points (original posting by an agency, retweeting with user commentary, or mashup). As social media continues to evolve, the field must engage with the question of whether the information lifecycle, or the information continuum, model holds more promise for technologies such as social media.

Given the continuing use of social media by the federal government and the challenges in capturing and preserving social media, a continuum-based view of records may come to be more appropriate framework for governance, including U.S. federal departments and agencies. This paradigm shift, from lifecycle to continuum, has implications across numerous areas of records management and government functioning. Departments and agencies will need to reconsider and redevelop policies, which are currently based almost exclusively on the lifecycle model.

Training will likewise need to be updated, with emphasis both on the rationale behind this shift and the day-to-day shifts in practices that may occur at various agencies. Furthermore, a shift to a continuum-based model will necessitate a broader skill set on the part of professionals within agencies. Practitioners will still need a strong understanding of records management principles and practice, but also will need to broaden their knowledge of information security, privacy, and emerging technologies. As practitioners adapt to the increased complexity of a continuum-based model, requiring them to make more nuanced decisions taking multiple factors into account, there may be an initial gap between practitioners’ current level of knowledge and the requirements for implementing this new model.

5.5 Recommendations

Based upon the analysis above, the following represent recommendations for management agency social media records through policy.

1. **Update federal guidance and department policy frequently to address specifics of records management challenges as they pertain to currently used social media platforms.** This might, for example, be accomplished by providing frequently-updated lists of approved or recommended tools that meet policy requirements and conform to best practices for records management. This might also provide specific guidance on topics such as how to capture information and records on different platforms and applications, and how to determine the social media components, features, and metadata that should be preserved. Agencies (beyond NARA) should consider providing specific guidance on issues such as budget, planning and resources and sustainability as they relate to records management.

2.

When developing department policy, it is recommended that agencies consider how they are situated in the Records Management Policy Quadrants (Figure 9). Those in Quadrants II and IV should reconsider their current approach by varying the frequency of update and potentially the level of detail of the policy. Policies situated in Quadrant I may serve as models for departments and agencies to follow. However, it is essential that they recognize that they must maintain the commitment to update the policy frequently; otherwise they could easily slip into Quadrant II, thereby negating the time and effort put into the policy development over time. For policies situated in Quadrant III, departments and agencies should ensure that appropriate supplemental information is included (as identified in Figures 7 and 8) in order to adequately address the changing technical and legal/regulatory environment. Sample policy language can be found in Appendix C.

3. **Include references to the specific and current legal and regulatory requirements.** Agencies should include legal and regulatory requirements in the records management and social media policies, relevant stakeholders can better understand their responsibilities and the legal implications with regard to managing social media content. This can be accomplished by including the references in the body of the policy and clearly stating that social media content may be governed by the specific legal and regulatory recordkeeping requirements. Including a comprehensive list of requirements is not necessary, although policies should, at a minimum, reference the Federal Records Act, Federal Records Disposal Act, Paperwork Reduction Act, Freedom of Information Act, E-Government Act, as well as NARA regulatory requirements. The policy may also include a hyperlink to a more detailed and current list of relevant legal/regulatory requirements.
4. **Include links to guidance and supplemental information for management of social media content.** Agencies should provide references and links to guidance documents and supplemental information in their records management and social media policies.

This can be included in the body of the policy and additional detail can be provided by adding hyperlinks to the actual guidance document. At a minimum, the policies should reference and link to the existing NARA, Federal CIO Council, OMB, GAO, and GSA guidance on managing social media content, in addition to any internal agency guidance. The policies should also link specifically to the department records website or NARA website, in order to address the frequently updated content such as agency guidance and specific procedures for managing information. This is essential because social media tools may evolve more rapidly than official policy and by linking to external websites that are updated frequently, relevant stakeholders can easily access detailed and updated information to enable them to effectively manage this content.

5. **Cross reference social media policies and records management policies.** Federal agencies should ensure that their social media policy references and hyperlinks to their agency records management policy and that their agency records management policy references and hyperlinks to their social media policy. By including these cross-references, agency staff can increase awareness of this closely related policy and better see the complete picture with regard to their responsibilities for managing social media records. By following this recommendation, it would not matter which policy the agency staff initially accesses, they would be made aware of the existence of the other related policy.
6. **Provide detailed roles or responsibilities and contact information.** In order to understand the responsibilities for managing social media records better, federal agencies can include specific roles and responsibilities for relevant stakeholders. For example, records management and social media policies should include responsibilities of various roles such as webmaster, records management officer, or content contributors. When possible, the agency should include the name and link to contact information of the responsible party in order to answer questions, provide clarifications or additional information with regard to policy implementation.

6.0 Conclusion

In conclusion, records management of social media content poses unique challenges related to both technology and policy in federal agencies. Currently records management and social media policies are beginning to address this issue in federal departments and agencies. Based on the analysis in this paper, there are a wide range of methods for addressing this issue in policy. Best practices and areas of improvement were identified in this paper and incorporated into a proposed policy statement. A number of issues continue to exist surrounding the technology and methods for managing each of different types of social media. Further research is needed to determine how agencies are implementing these policies in practice, and in the meantime, practitioners should refer to the existing federal guidance and best practices.

Appendix

Appendix A: Federal Reports and Guidance on Management of Social Media Records

General Services Administration (GSA)

GSA Social Media Handbook. (2009). Retrieved from www.gsa.gov/graphics/staffoffices/socialmediahandbook.pdf

Government Accountability Office (GAO)

Federal Agencies Need Policies and Procedures for Managing and Protecting Information They Access and Disseminate. (2011). *Report to Congressional Requesters (GAO-11-605)*. Retrieved from www.gao.gov/new.items/d11605.pdf

Federal CIO Council

Guidelines for Secure Use of Social Media by Federal Departments and Agencies. (2009). Retrieved from <http://energy.gov/sites/prod/files/maprod/documents/SecureSocialMedia.pdf>

National Archives and Records Administration (NARA)

A Report on Federal Web 2.0 Use and Record Value. (2010). Retrieved from www.archives.gov/records-mgmt/resources/web2.0-use.pdf

White Paper on Best Practices for the Capture of Social Media Records. (2013). Retrieved from <http://www.archives.gov/records-mgmt/resources/socialmediacapture.pdf>

Guidance on Managing Social Media Records. (2014). Retrieved from <http://www.archives.gov/records-mgmt/bulletins/2014/2014-02.html>

Executive Office of the President, Office of Management and Budget (OMB)

Social Media, Web-Based Interactive Technologies, and the Paperwork Reduction Act. (2010). Retrieved from http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/SocialMediaGuidance_04072010.pdf

Appendix B: Federal Departments Included in Analysis

Department of Defense

Department of Veterans Affairs

Department of Homeland Security

Department of Justice

Department of Treasury

Department of Agriculture

Department of Interior

Department of Health and Human Services

Department of Transportation

Department of Commerce

Department of Labor

Department of Energy

Department of State

Department of Housing and Urban Development

Department of Education

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Appendix C: Sample Policy Language

For the purposes outlined in the previous sections, potential language is recommended below that would seek to incorporate the best practices and address the shortcomings of the issues not adequately addressed in the policies. It is recommended that the text of the proposed policy be included in both the records management and social media policy of each federal agency. The proposed text of the policy is included below.

Management of Social Media Records:

With social media and web-based interactive technologies, agencies should be aware that their activities may generate records that will need to be managed like other agency information resources. Records in social media applications may be subject to (but not limited to) the Federal Records Act, Federal Records Disposal Act, Paperwork Reduction Act, or Freedom of Information Act, E-government Act, and NARA regulatory requirements. For a comprehensive list of applicable requirements are included in the NARA records management website.

Operating units must ensure that the records maintained on social media applications are secure and adequately safeguarded from unauthorized disclosure or destruction. Staff and content creators should partner to articulate clear processes and recordkeeping roles and responsibilities thereby ensuring social media records are identified and managed. The records must be retained consistent with the agency records retention policy, guidance regarding the management of social media records and social media policy. Specific procedures for managing various forms of social media are included in the agency records management website.

When possible, content creators are encouraged to avoid storing unique official record content in third party social media applications, since there is no guarantee that the third party applications will be able to meet agency recordkeeping requirements. If this is not feasible, ensure that service level agreements for third party hosted applications are updated to integrate and adhere to internal recordkeeping requirements.

Various guidance has been issued that relate to the management of social media records such as the NARA Guidance on Managing Records in Web 2.0/Social Media Platforms, Federal CIO Council Guidelines for Secure Use of Social Media by Federal Departments and Agencies and OMB Guidance for Agency Use of Third-Party Websites and Applications. Additional guidance on recordkeeping issues is available through the NARA's Records Management Policy and Guidance.

For more information, contact your agency records officer with any additional questions.

Appendix D: NARA Clause for Standard GSA Terms of Service Agreement

NARA developed the following general clause for use in the standard GSA [Terms of Service agreement](#):

The Agency acknowledges that use of contractor's site and services may require management of Federal records. Agency and user-generated content may meet the definition of Federal records as determined by the agency. If the contractor holds Federal records, the agency and the contractor must manage Federal records in accordance with all applicable records management laws and regulations, including but not limited to the Federal Records Act (44 U.S.C. chs. 21, 29, 31, 33), and regulations of the National Archives and Records Administration (NARA) at 36 CFR Chapter XII Subchapter B). Managing the records includes, but is not limited to, secure storage, retrievability, and proper disposition of all federal records including transfer of permanently valuable records to NARA in a format and manner acceptable to NARA at the time of transfer. The agency is responsible for ensuring that the contractor is compliant with applicable records management laws and regulations through the life and termination of the contract.

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