

ANSI/ARMA 18-2011

# Implications of Web-Based, Collaborative Technologies in Records Management



Approved January 13, 2011

# Implications of Web-Based, Collaborative Technologies in Records Management

An American National Standard



ANSI/ARMA 18-2011

Consulting Editor: Cynthia A. Hodgson  
Composition: Cole Design & Production  
Cover Art: Cole Design & Production

ARMA International  
11880 College Blvd., Suite 450  
Overland Park, KS 66210  
913.341.3808

© 2011 by ARMA International. All rights reserved.  
Printed in the United States of America.

The text of this publication, or any part thereof, may not be reproduced  
without the written permission of ARMA International.

ISBN: 978-1-936654-03-1  
ISBN: 978-1-936654-04-8 (PDF version)

A4923  
V4923 (PDF version)

# TABLE OF CONTENTS

---

Foreword .....	iv
Acknowledgments .....	vi
1 Purpose.....	1
2 Scope and Equivalency .....	1
3 Normative References .....	2
4 Terms and Definitions.....	2
5 Applying GARP® to Web-Based, Collaborative Technologies .....	4
5.1 Introduction .....	4
5.2 Principle of Accountability .....	4
5.3 Principle of Integrity .....	5
5.4 Principle of Protection.....	6
5.5 Principle of Compliance .....	6
5.6 Principle of Availability .....	7
5.7 Principle of Retention .....	7
5.8 Principle of Disposition.....	8
5.9 Principle of Transparency .....	9
6 Program Components for Web-Based, Collaborative Technologies .....	9
6.1 Governance.....	9
6.2 Legislation, Laws, and Regulations .....	10
6.3 Infrastructure/Technology.....	11
6.4 Risk Management, Behavioral Norms, and Security .....	11
6.5 Policies and Procedures .....	12
6.5.1 Developing Policies and Procedures .....	12
6.5.2 Policies .....	12
6.5.3 Procedures .....	13
6.6 Processes and Controls .....	13
6.6.1 Capturing and Preserving Records .....	13
6.6.2 Tagging and Metadata .....	14
6.6.3 Controlling and Ensuring Access .....	15
6.6.4 Data Maps.....	15
6.7 Change Management .....	16
6.8 Training.....	17
6.9 Auditing and Evaluation .....	17
Bibliography .....	19
About ARMA International .....	22

# FOREWORD

---

From the fifteenth century to the first half of the twentieth century, the printing press was the defining model for information dissemination. Then, in 1946, the first digital computer ushered in a new era of information processing. Within the succeeding decades, the concept of a personal computer took hold. Before the millennium closed, the average person could connect his/her personal computer to the World Wide Web and explore the universe of information known as the Internet. By 2004, pundits were declaring the age of Web 2.0, a move from the static HTML pages of Web 1.0 to an interactive collaborative web environment. It did not take long for this trend to begin transforming society, leading *Time Magazine* to declare “You” as the Person of the Year in 2006 saying:

*But look at 2006 through a different lens and you'll see...a story about community and collaboration on a scale never seen before. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes.*

*The tool that makes this possible is the World Wide Web. The new Web is a very different thing. It's a tool for bringing together the small contributions of millions of people and making them matter. Silicon Valley consultants call it Web 2.0, as if it were a new version of some old software. But it's really a revolution.*

Since then, we've seen even further technological changes with the explosion of social networking sites like Facebook, Twitter micro-message blasts, and online collaborative document tools like Google Docs. These changes have heralded an era in which the recording of information has gone from capturing only the most important documents deemed as official records by an organization or government, to one in which any individual connected to the World Wide Web could share and archive anything, from the trivial to the scholarly. The market intelligence firm IDC has forecast in their ongoing study *The Digital Universe*, prepared for EMC Corporation, that digital information will grow by a factor of 44 between 2009 and 2020 to an astounding 35 zettabytes (1 zettabyte = 1 trillion gigabytes) residing in 25 quintillion containers, the files that have to be “managed, protected, and stored.”<sup>1</sup> For records and information managers, the need for current guidance regarding the use of web-based, collaborative technologies is immediate. We are now in an era in which the recording of information has undergone a transition.

On May 6, 2010, the *Washington Post* wrote the following about what the Library of Congress announcement to archive all public Twitter “tweets” might mean for future historians:

*The purview of historians has always been the tangible: letters, journals, official documents...Michael Beschloss, historian and author of “Presidential Courage,” [asks] “What historian today wouldn't give his right arm to have the adult Madison's contemporaneous Twitters about the secret debates inside the Constitutional Convention in Philadelphia?”...[H]istorian and Pulitzer Prize finalist H.W. Brands [points out] “The very hard part is writing about ordinary people during ordinary times.” This is why Twitter will become important...Twitter provides a deeply personal insight into the daily lives of average individuals—on a scale that is completely unprecedented. The more interesting possibility is that there are tweets whose value we do not yet see...Somewhere, there are tweets that foreshadow enormous moments in history. We just haven't learned what they are yet. [There are] hopes that in the future, Twitter can be used to help researchers understand how information was dispersed and what human networks in the early 21st century looked like.<sup>2</sup>*

Despite the social web's increasing ubiquity in everyone's daily lives, business and government at first thought they were immune to this trend. However, by 2006 and into 2007, the concepts

---

<sup>1</sup> IDC. *The Digital Universe Decade – Are You Ready?* [website]. EMC Corporation, May 2010. Available at: [www.emc.com/collateral/demos/microsites/idc-digital-universe/iview.htm](http://www.emc.com/collateral/demos/microsites/idc-digital-universe/iview.htm)

<sup>2</sup> Hesse, Monica. *Twitter Archive at Library of Congress Could Help Redefine History's Scope*. The Washington Post, May 6, 2010. Available at: [www.washingtonpost.com/wp-dyn/content/article/2010/05/05/AR2010050505309.html](http://www.washingtonpost.com/wp-dyn/content/article/2010/05/05/AR2010050505309.html)

---

of “Enterprise 2.0” and “Government 2.0” had emerged, and early thought leaders formally sought to describe how the trends on the global Internet were changing the nature of business and government. Yet a February 2009 *Internet Evolution* report cited an AIIM study that indicated only 13% of organizations had a records management plan for social networks and 87% either did not have a plan or didn’t know if there was a plan.<sup>3</sup>

Although records management practices are grounded in the concept of managing information based on content and context, regardless of media, information created and/or stored (posted) in web-based, collaborative technologies (applications) deserve special attention. Standards are still evolving and the tools, plans/policies, and functions associated with these technologies are ever-changing. Given the lack of standardization, no two web-based, collaborative technologies adhere to the same specifications. So it is not surprising that records managers and information technology professionals struggle to keep pace with current practices.

Against this backdrop, this standard was developed to establish a framework to benefit organizations that are using or thinking of using web-based, collaborative technologies. While the decision to incorporate these technologies into the day-to-day practice of records and information management directly impacts records professionals, for optimal results cooperation is needed from individuals in other functional areas within the organization, including (but not limited to) human resources, information technology, legal, and marketing.

The Bibliography provides resources for further guidance in addition to citations for documents mentioned informatively in the standard.

This material has been developed under the published procedures of ARMA International, which are designed to ensure the appointment of technically competent committees having balanced representation. Although the procedures ensure the highest degree of care, ARMA International, its members and those participating in its activities do not accept any liability resulting from compliance or noncompliance with the provision given herein, for any restrictions imposed on materials or processes, or for the completeness of the text. ARMA International has no power or authority to police or enforce compliance with the contents of this document. Any certification of product stating compliance with the requirements of this document is made at the peril of the certifier.

Comments on the content of this publication should be sent by e-mail to: [standards@armaintl.org](mailto:standards@armaintl.org) or by mail to: ARMA International, 11880 College Boulevard, Suite 450, Overland Park, Kansas 66210, Attn: Standards.

---

<sup>3</sup> Jander, Mary. *The Web 2.0 Balancing Act, Managing the Mess*. Internet Evolution, February 14, 2009, Figure 2. Available at: [www.internetevolution.com/document.asp?doc\\_id=172026&page\\_number=5](http://www.internetevolution.com/document.asp?doc_id=172026&page_number=5)

# ACKNOWLEDGMENTS

---

ARMA International gratefully acknowledges the contributions provided by the following individuals who were instrumental in the creation of this standard. Company affiliations listed are those on record with ARMA International at the time of printing.

**Consensus Group Leader:**

Patricia C. Franks, Ph.D., CRM – San Jose State University, San Jose, CA

**Consensus Group Members:**

John Breeden, CRM – Old Dominion Electric Cooperative, Glen Allen, VA

Donald Burke – Central Intelligence Agency, Alexandria, VA

Darin Cote, CRM – National Archives and Records Administration, SW, Ft. Worth, TX

George D. Darnell, CRM – SAIC, Reston, VA

Naomi L. Gage, CRM – Iron Mountain, Port Washington, NY

Brent Gatewood, CRM – PelliGroup, Waukesha, WI

Mary Beth Herkert, CRM, CA – Oregon State Archives, Salem, OR

Bill Manago, CRM – Autonomy, Inc., Coconut Creek, FL

Deborah L. Rifembark, CRM – Stinson Morrison Hecker, LLP, Kansas City, MO

Jason Stearns, CRM – New York Life, New York, NY

Paula Walker – Duff and Phelps, Chicago, IL

Mary Wilson, CRM – Centers for Disease Control and Prevention, Atlanta, GA

Thank you to the ARMA International Standards Development Program RIM Review Group members who graciously offered their time and talents to assist with the manuscript review and to the members of the former Standards Development Committee for providing a comprehensive vetting of the project proposal from which this publication was developed.

Special thanks to the ARMA International Standards Development Program standards consultant, Nancy D. Barnes, Ph.D., CRM, CA, who served as project manager for the development of this publication, and to Vicki Wiler, Director of Publications, ARMA International.



## ► 1 Purpose

This American National Standard provides guidance for records and information management professionals for applying records management practices to the use of internally-facing or externally-directed (public or private), web-based, collaborative technologies by an organization or by its individual members. Adherence to Generally Accepted Recordkeeping Principles® (GARP®) is also supported and encouraged by advice contained within this publication.

Although primarily designed for use by records management practitioners and individuals employed in information technology, other professionals within the organization may also find it useful.

## ► 2 Scope and Equivalency

This document defines requirements and recommendations for records and information management professionals when using web-based, collaborative technologies. General examples of web-based, collaborative technologies covered by this standard include, but are not limited to, social media such as wikis, blogs, mashups, and classification (tagging) sites. Topics covered include policies, procedures, and processes related to records and information management (RIM) best practices in the use of web-based, collaborative technologies.



This publication does not provide records management requirements and recommendations for e-commerce, e-mail, instant messaging (IM), or workflow solutions; although it is recognized that the aforementioned activities may, under certain circumstances, be conducted within a web-based, collaborative technology setting.

Nothing in this standard is intended to preclude the application of new methods, technologies, or techniques for web-based, collaborative technologies within RIM.

### ► 3 Normative References

The following resource contains provisions that, through reference in the text, constitute provisions of this American National Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, though, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the following:

GARP®: The Generally Accepted Recordkeeping Principles®. Lenexa, KS: ARMA International, approved Feb. 20, 2009. Available from: [www.arma.org/garp/](http://www.arma.org/garp/)

### ► 4 Terms and Definitions

This section contains only those definitions essential for clarification of this standard. Definitions followed by [ARMA Glossary] were adopted from ARMA International's *Glossary of Records and Information Management Terms*, 3rd edition.

**authenticity (of a record):**

The sum of the qualities of a record that establish the origin, reliability, trustworthiness, and correctness of its content. [ARMA Glossary]

**blog:**

An online journal with regular chronological entries written by one or more individuals that may provide readers with the ability to comment on postings. Derived from the phrase "web log."

**collaboration:**

The act of working jointly with others on a particular project or endeavor. In the context of this standard, the endeavor usually relates to some intellectual activity.

**data map:**

A comprehensive and defensible inventory of an organization's electronically-stored information that includes all the relevant IT systems and media (online and offline) and the responsible business units, data stewards, and custodians.

**folksonomy:**

A collaborative effort by users to create and manage their own tags for the classification and categorization of online content.

**mashup:**

In the web environment, a combination of information, media, or tools from two or more sources that previously had no relation to each other, which results in new content or a new service.