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ORIGINAL PAPER

- 2 Smithsonian Team Flickr: a library, archives, 3 and museums collaboration in web 2.0 space
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- 8 Abstract The Flickr Commons was created as a forum for institutions to share their rich
- 9 photographic collections with the emerging Web 2.0 audience of Flickr; the Smithsonian
- Institution was the fourth member of the Commons. The Smithsonian effort was a direct
- collaborative effort of the libraries, archives, museums, and information technology staff that generated new pathways for collaboration between these units. As the world's largest
- museum complex, these Smithsonian units serve as a microcosm for collaboration in the
- information age. The Flickr Commons project provided insights into how the knowledge,
- skills, and abilities of libraries, archives, and museums (LAM) can converge in the Web 2.0
- environment to provide collection access to new, and in some cases unknown, audiences.
- Simultaneously, by putting "LAM" content into an environment that allows for direct
- interaction by these audiences, the knowledge of the content for holding institutions is
- 19 enriched. By exposing Smithsonian content within the Flickr environment, the Institution is
- 20 learning what content is desired by the Web 2.0 world, how to bring crowd-sourcing into
- 21 professionally curated collections, and how to bring diverse institutional skills together in a
- 22 collaborative project.
- 23 Keywords Flickr · Photography · Smithsonian · Collaboration · Libraries ·
- 24 Archives · Museums
- 25 Introduction
- 26 There is too much information in today's online world to continue to build silos of content
- 27 that may or may not be accessed by increasingly online and mobile audiences. The
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connected world is increasingly finding virtual content in spaces where they already live, work or play. Content providers—especially the library, archive and museum communities (LAMs)—must work to move their content from single access point portals to larger shared spaces. This can be accomplished either by exposing content and content metadata to harvesters and aggregators of content, or through participation in large-scale social spaces such as Facebook, MySpace, YouTube, and a host of others. As Günter Waibel (2008) has noted:

"Old School: Let's boost our Google ranking so people come interact with our content on our site. New School: Let's allow people to interact with our content in the places where they already work and play" (Waibel 2008).

As an experiment in these virtual spaces, the Smithsonian chose to expose a small portion of its vast photographic collection on Flickr Commons, Specifically designed for cultural heritage institutions, Flickr Commons provided a safe and regulated space for the Smithsonian to engage in this online experiment. The Flickr Commons project also provided the Smithsonian an opportunity to build on an ongoing collaboration between its library, archives, museum, and information technology units. Flickr was specifically chosen over other potential sites (e.g. Picassa, Wikimedia, etc.) because of the online community element that was already in place. The specific cultural heritage environment that Flickr created with the Flickr Commons also provided a space where like-minded institutions could merge content for even greater interaction with a large, online community.

Background: digital imaging at the Smithsonian

Before we examine how the Smithsonian manages the exposure of its photographic resources in Flickr Commons, it is important to understand the dispersed nature of the Smithsonian's photographic collections, and that management of Smithsonian digital assets for external access is not centralized in one unit. The Smithsonian is a federated institution comprising fourteen museums, seven research centers, the National Zoo, and various outreach programs (e.g. the Center for Folklife and Cultural Heritage)—all of which hold photographic collections, digital and non-digital. Often, photographs by a single photographer or on a single topic exist in multiple museums (for example, photographs by Richard Avedon are held in the Smithsonian American Art Museum and National Museum of American History, photographs of American Indians are found in the National Museum of American Indian, the National Anthropological Archives, Smithsonian Libraries, etc.). One of the strengths of the Smithsonian is the uniqueness and independence of its units. This strength also presents a challenge in appearing as "one Smithsonian." In many areas, including access to and use of digital images, the Smithsonian tends to operate at the unit level, in reflection of their uniqueness and independence.

Photographic resources at the Smithsonian

The photographic collections, within the Smithsonian's various museums, archives, 68 library, and research units, are held as documents of historic, artistic, and scientific import 69 and as documents of photographic processes and techniques. There are an estimated 13 70 million images in the Smithsonian photographic collections, so the selection of images currently available online through Smithsonian Images, and individual Smithsonian unit



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web sites is a rather small representation of the enormous resources that are not yet available in electronic form, nor are they cataloged sufficiently to do in-depth research into the collections. Smithsonian photographic collections, dispersed among the various units of the Institution, are not accessible in any unified way. The Smithsonian aspires to bring these collections together virtually, in an institutional digital asset management system, using common metadata templates that will allow cross searching and discovery. This is first aimed at those images that are now being created digitally or are being converted to digital formats from the analog negatives and positives.

Smithsonian Photographic Services (SPS), which manages the SmithsonianImages.com website, is a centralized office that holds the documentary photography of the Institution dating back to the first Smithsonian photographer. This collection primarily consists of photographic documentation of museum collections and Institutional events. SPS also serves as the custodian for various subject-based photographic collections that museum curators have acquired over the years. It provides access to the photographs it holds by responding to requests from museum staff who manage the content of the images and to requests received through the Smithsonian Images website, providing fulfillment for photograph requests to research and academic audiences, as well as the general public. SPS is now a unit within the Smithsonian Institution Archives. Its growing importance is to provide for the preservation of and access to this historic archive of photographs going back to the very beginning of the Smithsonian. Among the Smithsonian units with photographic collections, SPS manages by far the largest number of images. The long term plan for these images is to create better descriptions and access to the holdings, address any major preservation problems that exist, and ultimately find the resources needed to make the images comprehensively available through a large-scale digitization program.

The Smithsonian Photography Initiative (SPI), established in 2001, is a central web-based programmatic unit whose mission is to increase public engagement with the Smithsonian's photography collections across its units. Through its interactive exhibitions, publications, and educational outreach, SPI seeks to stimulate a dialog about the cultural impact of photography with new and existing Smithsonian audiences (http://click.si.edu). SPI's Search Images feature (http://photography.si.edu/SearchImage.aspx) is the only Smithsonian website to present a cross-section of art, science, culture, and history images drawn from each of the Smithsonian's units. SPI does not provide sales or licensing services, but redirects web visitors via links to the websites of the Smithsonian units, which manage the images and their content, for information about purchasing these images.

Understanding this background of dispersed image collections, the goal of bringing some pan-institutional organization to these collections, and making them more readily accessible for outside researchers, the general public, and internal users helps to explain how and why the Smithsonian joined the Flickr Commons. It also helps to explain that, while there are many benefits to the Smithsonian's federated organization, there is a need to present "one Smithsonian" to virtual visitors, without losing the richness of the Smithsonian's diversity.

113 Digitization strategies at the Smithsonian

In August 2006, the Smithsonian formed a Digitization Steering Committee, jointly chaired by staff from the Office of the Chief Information Officer and the Office of General Counsel, to initiate a pan-Institutional discussion on digitization at the Smithsonian. In March 2007, a formal report was published that documents the pan-Institutional conver-

sation and includes specific recommendations in seven categories. The first six address the



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resources and infrastructure needed to accomplish the seventh, which is to improve accessibility to digitized collections. All together, these recommendations included developing pan-Institutional approaches and standards for the creation, management, access, and use of the Institution's digital assets to meet the needs of our many audiences, including our web visitors.

As one of the responses to these recommendations, in April of 2007, the Smithsonian began a more detailed examination of its existing policies and practices relating to internal and external sharing of digital assets throughout the Smithsonian—including meeting with Library of Congress staff to discuss IT infrastructure needs to support digitization and procedural considerations including intellectual property rights.

In July 2007, the Smithsonian Digital Media Use Committee was formed to create a new pan-Institutional policy, reflecting current technologies and digital asset holdings, in support of its commitment to provide broad access to its digital assets and consistent with its legal and stewardship responsibilities. This committee sought to address the development of a common use and sharing policy for the Institution, for internal and external users. It became evident to the members of this group, as they worked to draft a common policy for the Institution, that the Smithsonian also needed to develop a common fee structure when delivery and preparation fees are charged for digital assets and when usage fees are charged.

Flickr Commons and the Smithsonian

- 139 Following conversations with the Library of Congress regarding its experiences in the 140
- Commons and with Flickr developers, the Smithsonian Institution made the decision, in 141 January 2008, to join the Commons with a 6-month pilot project. Staff at the Smithsonian
- 142 had been observing the Flickr community's activities around the Library of Congress's
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- images, shortly after it launched its images in the Commons in June 2007. After initial 144 internal discussion, in late February 2008, Richard Kurin, Acting Undersecretary for
- 145 History and Culture, invited Smithsonian units (including the library, archives, museums,
- 146 and other research centers) to participate in the Flickr Commons project.
- 147 Challenges and opportunities
- 148 The decision to join Flickr Commons was driven by the need to have a pan-Institutional 149 pilot to embrace the social networking reality of Web 2.0—choosing to go where visitors 150 are and not requiring them to come to us—and to test the waters on a small but growing 151 desire by some to provide a mechanism for including the voice for our public through 152 folksonomy. These two drivers were surfacing in the Smithsonian's strategic planning 153 discussions around digitization and the Web.
 - From the start, Smithsonian participants knew that among the challenges would be to address hesitation and concern for venturing into new territory with collection items and to break down traditional Smithsonian unit and community boundaries. It was also anticipated that the technical challenges associated with pulling digital assets from a variety of repositories, with inconsistent metadata in a variety of databases would provide a platform for later discussions to normalize this data. A major hurdle to be overcome was the Flickr Commons requirement that submitted photographs have "no known copyright" issues. This special statement, developed for the Flickr Commons, helped the Smithsonian
- 161 162 working group assigned the discussion of digital rights issues to closely examine the



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forward with the pilot project.

Project participants

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National Postal Museum

National Portrait Gallery

Smithsonian Astrophysical Observatory

Smithsonian's stance and to collect a body of content that would fall under this definition. The opportunity to begin tackling these challenges contributed to the decision to move

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The success of the Library of Congress' experiment in the Flickr Commons helped convince Smithsonian units to participate in this pilot project. The Smithsonian's Library of Congress colleagues had successfully demonstrated that inclusion in Flickr engaged broad audiences not otherwise accessing its collection, gave people an opportunity to comment upon the content of the collections, and drew new visitors to its own websites in massive numbers. Smithsonian involvement in the Flickr Commons also was facilitated by past conversations between the Smithsonian Photography Initiative (SPI) and Flickr developers in March 2007, at the South-By-Southwest Interactive Conference, prior to the launch of the Flickr Commons. SPI had incorporated social tagging on its first website and was seeking information about best-practices for folksonomies and social media

To coordinate the Smithsonian Flickr pilot project, the Smithsonian formed a core team,

which drew members from its library, archive, and museum communities, from central programmatic units that repurpose digital assets in support of their public programs, and

from its Office of the Chief Information Office (OCIO). The Director of the Central Digitization Office serves as the Project Manager. The team works as a collaborative body,

with each member fully contributing his or her talents and expertise, without being bounded by either job description or organizational home base. The project team includes:

Office of the Chief Information Officer (OCIO)

Smithsonian Center for Education and Museum Studies (SCEMS)

Smithsonian Institution Archives (SIA)

Smithsonian Institution Libraries (SIL)

Smithsonian Photography Initiative (SPI) A call to the Smithsonian community for digital images was issued in February 2008.

The Smithsonian plan called for providing approximately 2,000 digital photographic images to Flickr from a variety of collections throughout the Institution. The Smithsonian "decloaked" 900 of its images on June 16, 2008 to the Flickr community. Weekly uploads

of additional images began shortly after the launch and are continuing. Smithsonian Content Participants at the time of the June 2008 launch included:

Anacostia Community Museum

Archives of American Art

Center for Folklife and Cultural Heritage

National Museum of the American Indian

Smithsonian Institution Archives (includes the SPS collections)

Smithsonian Institution Libraries Content Participants added subsequently (through May 2009) include:

National Museum of Natural History

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For the initial batch of photographs, the Smithsonian chose to use the SPI website as the base home for the images. There were, however, two separate and unconnected workflows needed to achieve this. There is a direct relationship between the Commons and the SPI website: currently, for the pilot project, all images on the Commons are also available on the SPI website. Each image appearing on a Smithsonian Commons Flickr page has a direct link back to its page on the SPI web site. SPI serves as a safe site, common landing site from Flickr to the Smithsonian, and portal back into the various Smithsonian unit web sites.

The Smithsonian Flickr project team (dubbed "Smithsonian Team Flickr") continued to monitor activity on images during this initial 6-month pilot period (June 2008 through December 2008) and delivered a final report in summer 2009 that summarized and analyzed this activity (Springer et al. 2008). The Flickr Commons pilot project became more formalized in the spring of 2009 with the transfer of the Smithsonian Photography Initiative to the administrative oversight of Smithsonian Institution Archives. This formalization of the Flickr project will assist with creating requirements for the continuation of the Smithsonian's presence in the Commons. Lessons learned will contribute to the evolving web and new media strategy, as well as the pan-Institutional digitization strategy.

Our Flickr pilot project is part of an emerging strategy to "go where they are" in the Web 2.0 environment. The Smithsonian seeks to "go there" to increase access for educational and research purposes, and fully realize that in doing so we are going to a virtual location that is commercial and not a trusted website in many educational environments. Therefore, our strategy is to use this type of site in context and in parallel with development of access to these collections through Smithsonian web sites.

Lessons learned: content is king, or maybe it's really culture

- 231 In deciding to move forward with participation in the Flickr Commons, the Smithsonian 232 defined the following goals for the project:
 - Public knowledge. Increase public knowledge of and access to the Smithsonian's digital collections, programs, expertise, and other resources through the use of Smithsonian photographic collections to draw new visitors to the Smithsonian, those who might not otherwise come to our museums, libraries, and archives in pursuit of their interests.
 - Develop a Smithsonian online community. Continue to create community by reaching out to new and existing audiences. A key goal will be to explore the interests of "digital natives" who use social networking sites in ways we have yet to understand.
 - Improve public outreach. Through learning more about our audiences, through social tagging, public comments, and the resulting social dialog, increase current methods of outreach as well as develop new ones. Gather information about the interests of the Smithsonian's audiences and enhance the documentation and interpretation of our collections using the knowledge, perspectives, and experiences of these audiences.

The initial thinking was that there would be a measurable redirection of audiences from the Flickr Commons back to Smithsonian sites. Early statistics, however, have shown that there has been very little traffic in this direction. Ongoing development includes applications to pull tags, comments and notes from Smithsonian Flickr images within the Commons and store them on an internal server in a format that maintains links to our images. This will enable the Smithsonian to store a copy of this user comment while we



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exploring potential reuses of this Flickr community input. Possibilities being explored include appending them, with attribution, to object catalog records and using them, again, with attribution, as search terms and information on our Smithsonian web sites to increase findability.

New uses for new communities

In addition to the dissemination of Smithsonian images to a great variety of blogs, there are other potential reuses that can increase the exposure of Smithsonian images to new and larger communities. The following three examples are of particular interest.

- Tagging. Applying user generated terms to content, or tagging, has been a phenomenon since the early days of Flickr and del.icio.us. In the cultural heritage arena, the steve.museum project (Chun et al. 2006) was one of the first to solicit "crowd sourcing" or folksonomies to museum content. Though the steve.museum project has had a number of successes, it is still dependent on users coming to the steve.museum portal rather than putting content where users already were. Part of the Smithsonian Flickr Commons experiment would be to see what happens when content moves toward the crowd. As part of the Flickr Commons experiment, the Smithsonian, like other Commons participants, added only a single tag ("Smithsonian Institution") to the image on upload. By applying only this single tag, the Flickr community had the freedom to apply the maximum number of tags to an image.
- Machine Tags. An application used within Flickr (and accessible via the Flickr API), machine tags, also known as triple tags, are commonly used in programming (Flickr 2009). Simply put, machine tags use a special syntax to describe extra information about a tag. The faceted syntax includes a namespace, a predicate, and a value; i.e. "medium: paint = oil." The Flickr community has taken advantage of machine tags in the Smithsonian's Belize Larval Fish Group. Many of the images in this set are tagged using Linnaean taxonomic syntax (e.g. "taxonomy:genus = Sphyraena"; "taxonomy:species = barracuda"; "taxonomy:binomial = Sphyraena barracuda"; "taxonomy:common = Great Barracuda"). Application of machine tags within Smithsonian Flickr images will allow to be harvested by projects such as the Encyclopedia of Life (and also re-used in the Encyclopedia of Life Flickr site3) and other bioinformatics projects. 4
- Wikipedia. Without entering into the debate about the relative accuracy of Wikipedia, there is no debate that Wikipedia is among the most used sites on the Internet, consistently ranking in the top 10 of sites used by all Internet users.⁵ One method to increase the accuracy of Wikipedia content is to have authoritative sources add content to the site (Lally 2007). Wikipedia users were quick to find the Smithsonian Commons content useful. Two sets, "Portraits of Scientists and Inventors" (contributed by

⁵ Site use statistics from Alexa are available: http://www.alexa.com/data/details/traffic_details/wikipedia.org.



¹ http://www.flickr.com/photos/smithsonian/sets/72157607254072541/.

²FL01 ² http://www.eol.org.

³FL01 3 http://www.flickr.com/groups/encyclopedia_of_life/.

⁴FL01 ⁴ For example, see Rodrick Page, "What is a study about? Treemaps of taxa." http://iphylo.blogspot. com/2008/11/what-is-study-about-treemaps-of-taxa.html. There are, however, some drawbacks that could be exploited in this use of unvetted tagging, see Chris Freeland, "New EOL Flickr Group". http://blog.chrisfreeland.com/2008/09/new-eol-flickr-group.html.



Smithsonian Institution Libraries)⁶ and "Portraits of Artists" (contributed by the Archives of American Art)⁷ have been used by Wikipedia contributors to enhance content.

293 Increased exposure for Smithsonian images

Usage statistics are being captured on a regular basis as part of the Flickr Commons project. Summary statistics (from 16 June through 7 December 2008) show that there have been:

- Total views of all photographs, etc.: 627,259
- Most views, single image: 25,301 (Uniformed Letter Carrier with Child in Mailbag)⁸
- 299 Contacts: 3.000+

An ongoing analysis of these statistics has shown that Flickr definitely increases exposure of Smithsonian images to more individuals, especially niche users who are interested in photography. Similar to the Library of Congress, the general public does not normally think of the Smithsonian when it thinks of photographs.

A good example of increased exposure to the images comes from the above mentioned Smithsonian Libraries' "Portraits of Scientists" set on Flickr. These photographs of nineteenth and early twentieth century scientists and inventors have been available on the Smithsonian Libraries' website since 2003. Though a popular and cited web resource, in the 3 months since the photographs have been on Flickr, they received nearly as many visits as during the previous 5 years on the Smithsonian site.

As would be expected, there was an initial surge of interest in the Smithsonian Commons' content immediately after launch. Traffic soon settled into a "steady state" approximately 3 months after the June launch to an average of 2,348 views per day. The addition of incremental new content (approximately 20–40 new images per week) was able to break the "steady state" viewership and bump up usage statistics.

During the thirty day mid-September through October period, the Smithsonian added three new sets to the Flickr site: "Tennessee v. John Thomas Scopes Trial Photographs" (thirty-nine historic photographs taken by the Smithsonian Science Service during the famed "Monkey Trial" of John Scopes), "Belize Larval Fish Group" (forty-five images of tropical fish from research done by the Division of Fishes, National Museum of Natural History), and "Chandra X-ray Observatory" (eighty images from the space X-ray observatory jointly managed by the Smithsonian Astrophysical Observatory and NASA). This new content generated a 309% increase in daily views over the early steady-state period.

- 323 Visitor comments and favorites
- Flickr has the function of allowing users to mark images as "favorites" to indicate that they particularly enjoy an image and mark it for rediscovery later. Statistics from June through
- 326 October show that:
- 254 photographs had comments (22% of overall photostream); total of 513 comments
 overall
- 6FL01 6 http://flickr.com/photos/smithsonian/sets/72157605338975676/.
- 7FL01 ⁷ http://flickr.com/photos/smithsonian/sets/72157605409711458/.
- 8FL01 8 http://flickr.com/photos/smithsonian/2584174182/in/set-72157605338989538/.



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- Comments per image: high: 29 comments; average of 2 comments/image; average of one comment for every 2,089 views
- 559 photographs were favorited (48% of overall photostream); total of 2,344 favorites overall
- Favorites: High: 251 favorites; average of 4 favorites/image; average of 1 favorite for every 949 views
- 25 images have notes (2% of overall photostream); total of 60 notes overall
- Notes: High: 10 notes; average of 2.4 notes/image; average of 1 note for every 8,842

Perhaps, more interesting and useful in the Web 2.0 environment has been the interaction of Smithsonian photographs and the Flickr community. As just two of the many examples of positive comments received on the site are the following (with the typical Flickr user exuberance):

- lilialilia says: wow wow wow wow thank you so much to whoever decided to make the smithsonian photographs available for viewing via flickr it is a great and wonderful honour to be able to view these photos. thankyou so much i used a lot of smithsonian anthropological references and books for my degree research so I have always held the smithsonian in high regard, and always wished that one day if i was ever able to cross the sea that i would be able to visit and see the smithsonian collection for myself first hand, i have not been able to do that as yet, but having just discovered that i am able to view archive material online via flickr has filled me with amazement and gratitude to the great wonderful resource that is flickr and to whoever it was at the smithsonian who decided to make this wonderful archive collection available online through this open commons resource.
- mistubako says: this is great set! i love cyanotypes...

To continue to generate community around the Smithsonian Flickr images, Smithsonian staff has been monitoring comments on a regular basis. Generally, the comments streams have been allowed to play themselves out, allowing the Flickr community to generate and answer their own questions.

A Smithsonian Commons: "for the increase and diffusion of knowledge"

In his seminal 1968 article, "The Tragedy of the Commons," Garrett Hardin postulates that "Freedom in a commons brings ruin to all" (Hardin 1968). In a carefully argued case, Hardin notes how the individual, logical use of resources by individuals will lead to the tragedy—used in this case in the sense of inevitable working of things—of eventual overuse and loss of the same resources.

How different are the lessons of the Flickr Commons! In the digital environment, the factors of scarcity and overuse are obviated (if not eliminated). Unlike Hardin's Commons, each addition to the Commons increases the overall value of the Commons. Each additional consumer of the products of the Commons adds to the commensurable experience of each and all users. As Michael Edson has noted.

"Given the model of the commons...the rise of social media, the rise of distributed collaboration, the rise of crowdsourcing, the rise of "free" business models, and

⁹ Harden's argument has been rebutted in various disciplines (Husaina and Bhattacharyab 2004).

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shifting attitudes about content and brand, I assert that reshaping our digital identity around the concept of a Smithsonian Commons is the way to move forward—it's the game changer: a low risk, high reward proposition that addresses the fundamental challenges of the Institution in terms of brand, audience, operations, speed, governance, integrity, education, research, revenue generation, leadership, and legacy" (Edson 2008).

James Smithson, in his Last Will and Testament of 1826, laid the foundation for the Smithsonian Institution: "... to found at Washington, under the name of the Smithsonian Institution, an Establishment for the increase and diffusion of knowledge..." Each century brings new technologies and challenges to the idea of "increase and diffusion of knowledge." The 21st century presents us with a new series of challenges, but challenges that are laden with opportunities to reach audiences, deliver content, and interact with a world community unimaginable by Smithson. Through the collaboration of the libraries, archives, museums, and information technology units of the Smithsonian on the Flickr Commons project, a host of new possibilities are opened.

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419 Author Biographies

Martin R. Kalfatovic is the Assistant Director, Digital Services Division at Smithsonian Institution Libraries. The Digital Services Division oversees the libraries digitization efforts that include digital editions and collections, online exhibitions, and other website content. Current projects include work on metadata, standards, and intellectual property issues. He was the Smithsonian Institution Libraries lead on the Smithsonian Flickr Commons project. He is a frequent contributor of articles and reviews to various publications and the author of Creating a Winning Online Exhibition: A Guide for Libraries, Archives, and Museums (2002). He received his M.S.L.S. from The School of Library and Information Science, The Catholic University of America, in 1990.

Effic Kapsalis is the Senior Digital Producer at the Smithsonian Photography Initiative (photography.si.edu), which is a program under the Smithsonian Institution Archives. She currently leads the Smithsonian's effort on the Flickr Commons. She has more than 10 years experience in managing, designing, and developing content for online environments in museum, corporate, and educational settings. She received her master's degree in pervasive technologies and social media at the University of the Arts in Philadelphia, PA in 2003. At SPI, she focuses on leveraging cutting-edge technology to provide the public meaningful experiences with the Smithsonian Institution's vast photography collection.

Katherine P. Spiess is the Director of the Smithsonian Institution's Central Digitization Office. She leads the Smithsonian's Digitization Strategic Plan Committee, which is charged with crafting the first pan-Institutional strategic plan for creating, managing, and promoting the digital collections in its libraries, archives, museums, and research units. She has written extensively on topics in material culture collections and information management and has taught courses in these subjects for George Washington University's Graduate Museum Studies Program, the American Association of Museums, and the Smithsonian Institution. Katherine served as the chair of the Smithsonian Flickr Commons project. She received her M.A. in Museum Studies from the New York State University, Cooperstown Graduate Program and holds a B.A. in Mathematics/Computer Science from the University of New Hampshire.

Anne Van Camp is the Director of the Smithsonian Institution Archives, appointed in March 2007. She has held a number of important positions within the archival profession including serving as manager of the Research Libraries Group (RLG) Member Programs from 1996–2007 where she was responsible for planning, designing, and implementing collaborative projects and programs to enhance access to and preservation of research resources of the RLG member institutions across the United States and around the world. Before joining RLG, she was the Director of the Archives of the Hoover Institution at Stanford University for 8 years. She is active in archival professional activities both nationally and internationally and has been involved in numerous projects developing standards and best practices for archives, special collections and other cultural heritage institutions. She has also served on a number of advisory boards including the US Department of State Historical Advisory Board.

Michael Edson is the Director of Web and New Media Strategy at the Smithsonian Institution. He has been involved in practically every aspect of technology and new media at the Smithsonian, including digitization, public access to collections, networking, place-of-business applications, project management, multimedia design and production, mobile platforms, Web and data strategy, and citizen-created content. Michael was the founding director of the Smithsonian's first blog, Eye Level, and helped to create the first Alternative Reality Game to be designed for a museum, Ghosts of a Chance.

