



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
10 Institution was the fourth member of the Commons. The Smithsonian effort was a direct
11 collaborative effort of the libraries, archives, museums, and information technology staff that
12 generated new pathways for collaboration between these units. As the world's largest
13 museum complex, these Smithsonian units serve as a microcosm for collaboration in the
14 information age. The Flickr Commons project provided insights into how the knowledge,
15 skills, and abilities of libraries, archives, and museums (LAM) can converge in the Web 2.0
16 environment to provide collection access to new, and in some cases unknown, audiences.
17 Simultaneously, by putting "LAM" content into an environment that allows for direct
18 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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28 connected world is increasingly finding virtual content in spaces where they already live,
29 work or play. Content providers—especially the library, archive and museum communities
30 (LAMs)—must work to move their content from single access point portals to larger shared
31 spaces. This can be accomplished either by exposing content and content metadata to
32 harvesters and aggregators of content, or through participation in large-scale social spaces
33 such as Facebook, MySpace, YouTube, and a host of others. As Günter Waibel (2008) has
34 noted:

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

38
39 As an experiment in these virtual spaces, the Smithsonian chose to expose a small
40 portion of its vast photographic collection on Flickr Commons. Specifically designed for
41 cultural heritage institutions, Flickr Commons provided a safe and regulated space for the
42 Smithsonian to engage in this online experiment. The Flickr Commons project also pro-
43 vided the Smithsonian an opportunity to build on an ongoing collaboration between its
44 library, archives, museum, and information technology units. Flickr was specifically
45 chosen over other potential sites (e.g. Picassa, Wikimedia, etc.) because of the online
46 community element that was already in place. The specific cultural heritage environment
47 that Flickr created with the Flickr Commons also provided a space where like-minded
48 institutions could merge content for even greater interaction with a large, online
49 community.

50 **Background: digital imaging at the Smithsonian**

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

66 Photographic resources at the Smithsonian

67 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
71 currently available online through Smithsonian Images, and individual Smithsonian unit



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

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

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

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

113 Digitization strategies at the Smithsonian

114 In August 2006, the Smithsonian formed a Digitization Steering Committee, jointly
115 chaired by staff from the Office of the Chief Information Officer and the Office of General
116 Counsel, to initiate a pan-Institutional discussion on digitization at the Smithsonian. In
117 March 2007, a formal report was published that documents the pan-Institutional conver-
118 sation and includes specific recommendations in seven categories. The first six address the



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

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

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

138 **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
143 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.

154 From the start, Smithsonian participants knew that among the challenges would be to
155 address hesitation and concern for venturing into new territory with collection items and to
156 break down traditional Smithsonian unit and community boundaries. It was also antici-
157 pated that the technical challenges associated with pulling digital assets from a variety of
158 repositories, with inconsistent metadata in a variety of databases would provide a platform
159 for later discussions to normalize this data. A major hurdle to be overcome was the Flickr
160 Commons requirement that submitted photographs have “no known copyright” issues.
161 This special statement, developed for the Flickr Commons, helped the Smithsonian
162 working group assigned the discussion of digital rights issues to closely examine the



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

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

177 Project participants

178 To coordinate the Smithsonian Flickr pilot project, the Smithsonian formed a core team,
179 which drew members from its library, archive, and museum communities, from central
180 programmatic units that repurpose digital assets in support of their public programs, and
181 from its Office of the Chief Information Office (OCIO). The Director of the Central
182 Digitization Office serves as the Project Manager. The team works as a collaborative body,
183 with each member fully contributing his or her talents and expertise, without being
184 bounded by either job description or organizational home base. The project team includes:

- 185 • Office of the Chief Information Officer (OCIO)
- 186 • Smithsonian Center for Education and Museum Studies (SCEMS)
- 187 • Smithsonian Institution Archives (SIA)
- 188 • Smithsonian Institution Libraries (SIL)
- 189 • Smithsonian Photography Initiative (SPI)

190 A call to the Smithsonian community for digital images was issued in February 2008.
191 The Smithsonian plan called for providing approximately 2,000 digital photographic
192 images to Flickr from a variety of collections throughout the Institution. The Smithsonian
193 "declassified" 900 of its images on June 16, 2008 to the Flickr community. Weekly uploads
194 of additional images began shortly after the launch and are continuing.

195 Smithsonian Content Participants at the time of the June 2008 launch included:

- 196 • Anacostia Community Museum
- 197 • Archives of American Art
- 198 • Center for Folklife and Cultural Heritage
- 199 • National Museum of the American Indian
- 200 • National Postal Museum
- 201 • Smithsonian Institution Archives (includes the SPS collections)
- 202 • Smithsonian Institution Libraries

203 Content Participants added subsequently (through May 2009) include:

- 204 • National Museum of Natural History
- 205 • National Portrait Gallery
- 206 • Smithsonian Astrophysical Observatory



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

215 The Smithsonian Flickr project team (dubbed “Smithsonian Team Flickr”) continued to
216 monitor activity on images during this initial 6-month pilot period (June 2008 through
217 December 2008) and delivered a final report in summer 2009 that summarized and ana-
218 lyzed this activity (Springer et al. 2008). The Flickr Commons pilot project became more
219 formalized in the spring of 2009 with the transfer of the Smithsonian Photography Ini-
220 tiative to the administrative oversight of Smithsonian Institution Archives. This formal-
221 ization of the Flickr project will assist with creating requirements for the continuation of
222 the Smithsonian’s presence in the Commons. Lessons learned will contribute to the
223 evolving web and new media strategy, as well as the pan-Institutional digitization strategy.

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

230 **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:

- 233 1. Public knowledge. Increase public knowledge of and access to the Smithsonian’s
234 digital collections, programs, expertise, and other resources through the use of
235 Smithsonian photographic collections to draw new visitors to the Smithsonian, those
236 who might not otherwise come to our museums, libraries, and archives in pursuit of
237 their interests.
- 238 2. Develop a Smithsonian online community. Continue to create community by reaching
239 out to new and existing audiences. A key goal will be to explore the interests of
240 “digital natives” who use social networking sites in ways we have yet to understand.
- 241 3. Improve public outreach. Through learning more about our audiences, through social
242 tagging, public comments, and the resulting social dialog, increase current methods of
243 outreach as well as develop new ones. Gather information about the interests of the
244 Smithsonian’s audiences and enhance the documentation and interpretation of our
245 collections using the knowledge, perspectives, and experiences of these audiences.

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



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

256 New uses for new communities

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

- 260 • Tagging. Applying user generated terms to content, or tagging, has been a phenomenon
261 since the early days of Flickr and del.icio.us. In the cultural heritage arena, the
262 steve.museum project (Chun et al. 2006) was one of the first to solicit “crowd
263 sourcing” or folksonomies to museum content. Though the steve.museum project has
264 had a number of successes, it is still dependent on users coming to the steve.museum
265 portal rather than putting content where users already were. Part of the Smithsonian
266 Flickr Commons experiment would be to see what happens when content moves toward
267 the crowd. As part of the Flickr Commons experiment, the Smithsonian, like other
268 Commons participants, added only a single tag (“Smithsonian Institution”) to the
269 image on upload. By applying only this single tag, the Flickr community had the
270 freedom to apply the maximum number of tags to an image.
- 271 • Machine Tags. An application used within Flickr (and accessible via the Flickr API),
272 machine tags, also known as triple tags, are commonly used in programming (Flickr
273 2009). Simply put, machine tags use a special syntax to describe extra information
274 about a tag. The faceted syntax includes a namespace, a predicate, and a value; i.e.
275 “medium: paint = oil.” The Flickr community has taken advantage of machine tags in
276 the Smithsonian’s Belize Larval Fish Group.¹ Many of the images in this set are tagged
277 using Linnaean taxonomic syntax (e.g. “taxonomy:genus = Sphyraena”; “taxon-
278 omy:species = barracuda”; “taxonomy:binomial = Sphyraena barracuda”; “taxon-
279 omy:common = Great Barracuda”). Application of machine tags within Smithsonian
280 Flickr images will allow to be harvested by projects such as the Encyclopedia of Life²
281 (and also re-used in the Encyclopedia of Life Flickr site³) and other bioinformatics
282 projects.⁴
- 283 • Wikipedia. Without entering into the debate about the relative accuracy of Wikipedia,
284 there is no debate that Wikipedia is among the most used sites on the Internet,
285 consistently ranking in the top 10 of sites used by all Internet users.⁵ One method to
286 increase the accuracy of Wikipedia content is to have authoritative sources add content
287 to the site (Lally 2007). Wikipedia users were quick to find the Smithsonian Commons
288 content useful. Two sets, “Portraits of Scientists and Inventors” (contributed by

1FL01 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>.

5FL01 ⁵ Site use statistics from Alexa are available: http://www.alexa.com/data/details/traffic_details/wikipedia.org.



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

293 Increased exposure for Smithsonian images

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

- 297 • Total views of all photographs, etc.: 627,259
- 298 • Most views, single image: 25,301 (Uniformed Letter Carrier with Child in Mailbag)⁸
- 299 • Contacts: 3,000+

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

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

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

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

323 Visitor comments and favorites

324 Flickr has the function of allowing users to mark images as “favorites” to indicate that they
325 particularly enjoy an image and mark it for rediscovery later. Statistics from June through
326 October show that:

- 327 • 254 photographs had comments (22% of overall photostream); total of 513 comments
328 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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- 329 • Comments per image: high: 29 comments; average of 2 comments/image; average of
330 one comment for every 2,089 views
331 • 559 photographs were favorited (48% of overall photostream); total of 2,344 favorites
332 overall
333 • Favorites: High: 251 favorites; average of 4 favorites/image; average of 1 favorite for
334 every 949 views
335 • 25 images have notes (2% of overall photostream); total of 60 notes overall
336 • Notes: High: 10 notes; average of 2.4 notes/image; average of 1 note for every 8,842
337 views

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

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

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

358 **A Smithsonian Commons: “for the increase and diffusion of knowledge”**

359 In his seminal 1968 article, “The Tragedy of the Commons,” Garrett Hardin postulates that
360 “Freedom in a commons brings ruin to all” (Hardin 1968). In a carefully argued case,⁹
361 Hardin notes how the individual, logical use of resources by individuals will lead to the
362 tragedy—used in this case in the sense of inevitable working of things—of eventual
363 overuse and loss of the same resources.

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

369 “Given the model of the commons...the rise of social media, the rise of distributed
370 collaboration, the rise of crowdsourcing, the rise of “free” business models, and

9FL01 ⁹ Harden’s argument has been rebutted in various disciplines (Husaina and Bhattacharyab 2004).



371 shifting attitudes about content and brand, I assert that reshaping our digital identity
372 around the concept of a Smithsonian Commons is the way to move forward—it's the
373 game changer: a low risk, high reward proposition that addresses the fundamental
374 challenges of the Institution in terms of brand, audience, operations, speed, govern-
375 nance, integrity, education, research, revenue generation, leadership, and legacy”
376 (Edson 2008).
377

378 James Smithson, in his Last Will and Testament of 1826, laid the foundation for the
379 Smithsonian Institution: “... to found at Washington, under the name of the Smithsonian
380 Institution, an Establishment for the increase and diffusion of knowledge...”¹⁰ Each
381 century brings new technologies and challenges to the idea of “increase and diffusion of
382 knowledge.” The 21st century presents us with a new series of challenges, but challenges
383 that are laden with opportunities to reach audiences, deliver content, and interact with a
384 world community unimaginable by Smithson. Through the collaboration of the libraries,
385 archives, museums, and information technology units of the Smithsonian on the Flickr
386 Commons project, a host of new possibilities are opened.

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392 invaluable assistance with the literature review and bibliographic citations. Smithsonian participation in the
393 Flickr Commons, as well as the Commons itself would not be possible with out George Oates, formerly of
394 Flickr, and her team at Flickr.

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419 Author Biographies

420 **Martin R. Kalfatovic** is the Assistant Director, Digital Services Division at Smithsonian
421 Libraries. The Digital Services Division oversees the libraries digitization efforts that include digital editions
422 and collections, online exhibitions, and other website content. Current projects include work on metadata,
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424 Smithsonian Flickr Commons project. He is a frequent contributor of articles and reviews to various
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426 *Museums* (2002). He received his M.S.L.S. from The School of Library and Information Science, The
427 Catholic University of America, in 1990.

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

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

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

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

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