



# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

**Status:**

Laureate

**Year:**

2013

**Organization Name:**

Biodiversity Heritage Library

**Organization URL:**

<http://www.biodiversitylibrary.org/>

**Project Name:**

Biodiversity Heritage Library

**Please select the category in which you are submitting your entry:**

Sustainability

**Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)**

The Biodiversity Heritage Library (BHL) is a consortial collaboration among 14 US and UK natural history and botanical libraries with the goal to provide free and open access to 250+ years of taxonomic species information. The challenges to BHL included working across institutional and national borders, creating the technological tools to rapidly and cost-effectively digitize a range of historically important science literature, and provide effective access to a worldwide community of scientists and others interested in the life sciences. Working with the scientific publishing community, BHL has agreements with over 250 publications to provide open access to in-copyright materials. In just over 5 years, the BHL has generated over 40 million pages of text and 110,000 volumes, and over 116,000 monthly users. Expanding to a new audience base, BHL now has over 55,000 images on Flickr (<http://www.flickr.com/photos/biodivlibrary/sets/>). An active social media presence engages the BHL audience in a global conversation on biodiversity and promotes new access points, such as Apple's iTunes U. The BHL blog (<http://.blog.biodiversitylibrary.org>) regularly highlights both contents and users. With

leadership based at the Smithsonian Libraries, the BHL has now established global partner nodes in Sub-Saharan Africa, Europe, China, Brasil, Egypt, and Australia. These global partners collaborate not only on content acquisition, but also technical development (as evidenced by the new user interface developed in conjunction with BHL-Australia that will launch in February 2013 [beta.biodiversitylibrary.org](http://beta.biodiversitylibrary.org)). The BHL has also developed a user-feedback program based on bug-tracking software, unique among digital libraries, that allows a global audience to highlight digitization problems, provide suggestions and prioritization for digitization, and technical developments. Continuing to grow, the BHL is now a trusted source in the world of biodiversity.

**When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)**

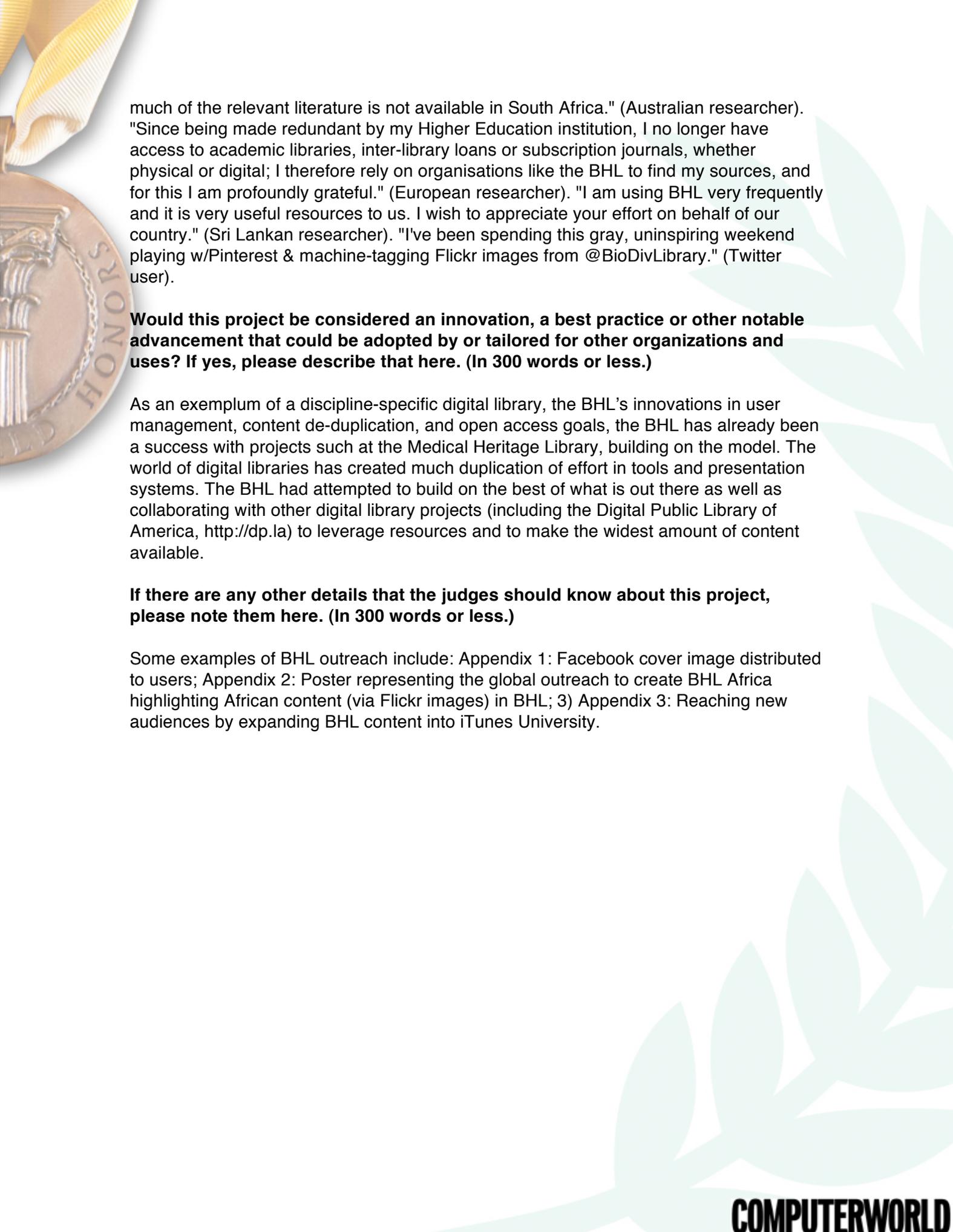
Begun in 2006 with 10 US/UK partners, the BHL was formally launched in May 2007. The partnership continues to grow, now with 14 US/UK partners (with two more expected to join in 2013). The BHL partnership has also expanded with the addition of global nodes in Sub-Saharan Africa, Europe, China, Brasil, Egypt, and Australia. Content also continues to expand with the 40 millionth digitized page and 110,000 volume added in December 2012. New technologies are actively added and refined. Though still based in the Microsoft .Net environment, additional elements (Fedora Commons repository, Drupal) have been added over time.

**Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)**

No. The BHL project is an ongoing contribution to the world of biodiversity science. Elements of the project will grow and change over time. The first 5-year phase of the project is now complete; the goal of this first phase was to generate 30 million pages of digitized text (exceeded by over 10 million pages). The second phase of the project was to expand the user base and to include more access to the rich visual content of the BHL (plant and animal illustrations and photographs); this phase is now underway. The next phase, to be begun in 2013, will be to architect the BHL platform to take advantage of newer technologies.

**Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)**

The BHL has begun to change the way that biodiversity and taxonomic research is done. In the past, taxonomists needed to make physical visits to the core libraries (often in the wealthy countries of the Northern Hemisphere) to track down species information that was available only in print form. Digital lending or photocopying solved some of this, but not with the speed demanded by researchers. Today, with 40 million pages of taxonomic literature online, researchers, even in remote areas with poor Internet connections, can access this content in hours, not days or months. Some of the comments from our users: "This is a tremendous and extremely valuable resource. I work on the taxonomy and systematics of molluscs and frequently need to refer to the older literature. Before the advent of the internet and the BHL, this was usually a very frustrating task because

A gold medal with a ribbon is visible in the top left corner. The medal features a classical architectural design and the word "HONORS" is partially visible. A large, light green laurel wreath graphic is positioned on the right side of the page, extending from the top to the bottom.

much of the relevant literature is not available in South Africa." (Australian researcher). "Since being made redundant by my Higher Education institution, I no longer have access to academic libraries, inter-library loans or subscription journals, whether physical or digital; I therefore rely on organisations like the BHL to find my sources, and for this I am profoundly grateful." (European researcher). "I am using BHL very frequently and it is very useful resources to us. I wish to appreciate your effort on behalf of our country." (Sri Lankan researcher). "I've been spending this gray, uninspiring weekend playing w/Pinterest & machine-tagging Flickr images from @BioDivLibrary." (Twitter user).

**Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)**

As an exemplum of a discipline-specific digital library, the BHL's innovations in user management, content de-duplication, and open access goals, the BHL has already been a success with projects such as the Medical Heritage Library, building on the model. The world of digital libraries has created much duplication of effort in tools and presentation systems. The BHL had attempted to build on the best of what is out there as well as collaborating with other digital library projects (including the Digital Public Library of America, <http://dp.la>) to leverage resources and to make the widest amount of content available.

**If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)**

Some examples of BHL outreach include: Appendix 1: Facebook cover image distributed to users; Appendix 2: Poster representing the global outreach to create BHL Africa highlighting African content (via Flickr images) in BHL; 3) Appendix 3: Reaching new audiences by expanding BHL content into iTunes University.