**Intro**

Over 45,000 titles, 88,000 volumes, 32 million pages, and 80 million taxonomic names, used by tens of thousands of users worldwide are managed by only a handful of library and technical staff. Juggling the tasks required to manage the digital library along with the duties they must perform for their own home brick-and-mortar institutions, the Biodiversity Heritage Library (BHL) staff have adopted an issue tracking system to harness the power of the crowd to resolve problems encountered within the BHL collection.

The Biodiversity Heritage Library (BHL) is a consortium of twelve natural history and botanical libraries that cooperate to digitize and make accessible the legacy literature of biodiversity held in their collections and to make that literature available for open access and responsible use as a part of a global “biodiversity commons.”

The digitization of books occurs one page at a time and so too must the process of troubleshooting the digital library collection happen one task at a time. Using Countersoft’s Gemini issue tracking software, BHL staff document and monitor user behavior, process scanning requests, crowd source problems with the collection and address them as needed, and engage with users…

**Gemini: Why we need it?**

The BHL is a unique mass-digitization scanning project in that it virtually brings together the collections of twelve major natural history and botanical garden libraries whose physical materials are otherwise managed separately. Each BHL member institution participates in the project by contributing their own collections of books and journals, managing their own workflows and volunteering its own staff resources. Acting individually to select, de-duplicate, and send content for scanning, the BHL member library consortium acts collectively to amalgamate the complete works of public domain biodiversity literature online.

In its infancy, the BHL consortium considered the adoption of a union catalog to help manage the digitization workflow from a collective approach. It was decided, however, that such an approach would be prohibitively time and labor intense. Considering the BHL as a single project within the larger context of the overall goals and objectives of each member institution, aligning the various BHL members' catalogs into a single ILS was simply not practical. The approach had to thus be one of autonomous operation under a collective goal: digitize and make available the contents of your library collection without duplicating the contents of another library’s collection.

Selecting materials for scanning without duplicating already digitized content is a complex process with twelve libraries that have very similar collections. De-duplication tools were developed to aid in this process, however many other factors contribute to the difficulty of communicating across the consortium as to which library is scanning what content.

Scanning workflow may sound simply enough: select materials, send them for digitization, and serve them via a web portal for your users to access them. Multiply this process twelve times over and factor in the incomplete collections of a single institution, various and fluctuating digitization schedules (libraries send books for scanning on a weekly to monthly basis depending), materials that will be rejected from the digitization process, and materials that are scanned improperly such as books with missing pages or poor page image quality. Verifying the quality of the scanned page images is a part of the workflow, but with such a large quantity of content being scanned and so few staff resources, it is impossible to do quality review for 100% of the BHL collection. So why not harness the power of the crowd to resolve problems encountered within the BHL collection?

Countersoft’s Gemini issue tracking system serves as a communication, documentation, and collection management platform by delivering user feedback to BHL staff in a meaningful way. The crowd-sourcing of issue discovery allows a few librarians to effectively manage the 88,000 plus volumes and growing collection. Gemini documents user feedback about scanning requests, missing volumes of a journal title, missing pages, poor image quality, de-duplicating titles, maintaining relevant content, correcting metadata, and traditional reference questions. Feedback from users not only helps BHL staff discover new issues, but informs known issues and inspires new development regarding technical functionality. More importantly, the user feedback received and monitored through Gemini allows staff to engage with individual users about specific issues while also facilitating collaboration among staff to resolve these issues. Issue by issue and user by user, Gemini maximizes the BHL’s ability to implement rapid-development and user-centered-design principles as part of its project philosophy.

No other tool would be able to deliver… Email, wikis, social-networking tools, blogs = fail.