DLF Assessment Interest Group 1

Title: Developing a Framework for Measuring Reuse of Digital Objects
Project Team: Santi Thompson, Primary Investigator (University of Houston), Elizabeth Kelly (Loyola University New Orleans), Martha Kyrilidou (QualityMetrics), Ayla Stein (University of Illinois), Liz Woolcott (Utah State University), Genya O'Gara (Virtual Library of Virginia), Caroline Muglia (University of Southern California)

Problem Statement: Content reuse, defined as how often and in what ways digital library materials are utilized and repurposed, is a key indicator of the impact and value of a digital collection. However, traditional library assessment analytics focus almost entirely on simple access statistics. Best practices for evaluating the reuse of unique, library-hosted digital assets need to be established and widely adopted in order to increase and improve upon reuse research, and ultimately build stronger digital collections for users. A toolkit detailing available tools, best practices, and use cases for studying the reuse of digital assets would facilitate standardization and impact measurement in the digital library field. $98,981 in funding from an IMLS National Leadership/National Forum (NL/NF) Grant will support the Digital Library Federation (DLF) Assessment Interest Group (AIG) User Studies Working Group (USWG) Reuse Subgroup's (hereafter: the project team's) conducting of a robust digital library community needs assessment focused on developing the use cases and functional requirements for a toolkit.

Statement of Need: In 2015 the DLF USWG generated a white paper, "Surveying the Landscape: Use and Usability Assessment of Digital Libraries." As part of this group's work, they examined the Digital Library community's measurement and assessment of content reuse as a key indicator of value for libraries, archives, and cultural heritage institutions. The group found that there has been some focused but limited scholarship in how content reuse is measured.

However, there are some prominent gaps, and almost no standardization, in institutional approaches to the measurement of content reuse. For example, while the measurement of content reuse using hyperlinks is a strength, there are a dearth of studies examining other mechanisms for tracking reuse of digital objects (such as using embedded identifiers) which is heavily exacerbated by a lack of consistent citation metrics for digital cultural heritage objects. Obstacles also exist for researchers attempting to analyze digital object reuse of materials residing on un-indexed platforms. Web log analysis as a method for predicting user needs lacks best practices, and without the ability to track individual objects via persistency in URLs and identifiers, analysis may lead to potentially biased perceptions of needs. And none of the methods examined allowed for tracking non--digital reuse of once digital material (i.e. physical exhibits, print publications, etc.).

Building from the recommendations put forward in the whitepaper, the project team proposes leveraging a NL/NF Grant to directly engage stakeholders in the planning of a toolkit for institutions of all sizes that would centrally locate important resources and scholarship, help in the development of standardization and best practices for digital libraries moving forward, and support the full lifecycle of a reuse assessment project.

The ultimate goal of the toolkit will be to provide a roadmap, tools, techniques, and documentation to assess the reuse of materials within a given digital library in order to help libraries plan and deliver content to different user groups. The toolkit will provide analysis of the purpose, strengths, and weaknesses of available tools and allow the user to choose the resources that best fit their assessment needs. Included resources will support the full lifecycle of reuse assessment, from defining goals, assembling vetted tools, and pointing to current studies and research in this area. This freely available, collaboratively developed resource supports the

IMLS priority of the development of a national digital platform, and will further help libraries and archives make decisions about their investments in digital library infrastructure.

In preparation for the submission of this application, the project team has conducted an environmental scan of existing tools and resources as well as of non-reuse toolkits in order to identify the ideal components to include in a future toolkit. A NL/NF Grant will enable stakeholders from a variety of institutions to meet with members of the project team to discuss the issues facing implementation of content reuse assessment, the tools and resources identified in the environmental scan, necessary infrastructure for the toolkit, and next steps towards toolkit development.

Proposed Work Plan and Performance Goal Measurement: IMLS funding will support a formal needs assessment, which will include data collection and analysis aimed at understanding the desired components of reuse assessment. Data collection will occur through in-person and virtual focus group sessions as well as via pre- and post- surveys. The end product of the NL/NF Grant will be a series of recommendations, which will translate results from the data analysis into use cases and functional requirements. These requirements will act as the building blocks that will drive the future development of a toolkit. The project team will form an advisory group to provide critical feedback on methods used for data collection and analysis and on the drafting of final recommendations.

The project team will collect data in the following ways: (a) administering a pre-survey to interested participants; this survey identifies potential gaps in current reuse assessment practices; (b) holding two in-person focus group sessions positioned strategically around prominent conferences focused on digital library theory and administration; (c) hosting two virtual focus groups, allowing greater participation beyond the in-person sessions; during both the in-person and virtual sessions, members will collect data on: the assessment needs of the community related to reuse, the tools and methods currently and historically used by the community to understand content reuse, the potential features and functionalities needed for a reuse toolkit, and the potential financial and institutional costs for building and maintaining a toolkit. The project team will disseminate this information via four methods: (1) progress updates and final results, compiled as a white paper, will be shared on the team's website and through CLIR/DLF publication channels; (2) the team will submit presentation proposals for three national conferences, to introduce this work and to share final results; (3) the team will document the methodology, results, and analysis in an article and submit it to an open access, peer reviewed journal; (4) and the team will deposit project data to a freely accessible data repository.

Impact and Relevance to IMLS Priorities: The outcome of this project will be documented, publicly shared, widely publicized, functional requirements and use cases for the development of a reuse assessment toolkit that can be utilized by information professionals working with digital libraries. This work directly advances the IMLS priority of a National Digital Platform by identifying sustainable and vetted assessment techniques that can be applied to a wide range of digital libraries, and promoting exemplary stewardship of library and museum digital collections. The development of this toolkit will allow libraries to better understand the ways users engage with, reuse, and transform digital library content. It will standardize approaches and best practices for communicating the economic, educational, scholarly, scientific, social and cultural value and impact of digital collections and, ultimately, will support the use of evidence-based approaches to build inclusive, user-centered platforms and systems.

Estimated Project Budget: The total amount requested from IMLS is $98,981: (a) $47,500 to conduct focus groups and virtual advisory board meetings; (b) $8,500 to providing honoraria for participants; (c) $16,275 to present at three professional conferences; and $26,706 for indirect costs related to program administration, which are calculated based on DLF's federally negotiated rates.