# **MEASURING REUSE OF DIGITAL OBJECTS** Preliminary findings from the IMLS-funded project

### Introduction

Content reuse, or how often and in what ways digital library materials are employed and repurposed, is a key indicator of the impact of digital libraries (as defined by Krystyna Matusiak) [1]. A literature review and whitepaper authored by the Digital Library Federation Assessment Interest Group (DLF-AIG) in 2015 found that traditional library analytics focus primarily on access and download statistics, which do not show how users utilize or transform unique materials from digital collections [2].

This lack of distinction, combined with nonstandard assessment approaches, makes it difficult to develop user-responsive collections or highlight the value of these materials, which in turn presents staffing, system infrastructure, and long-term funding challenges. The grant project Developing a Framework for Measuring Reuse of Digital Objects, an Institute of Museum and Library Services (IMLS)-funded project (LG-73-17-0002-17) by the DLF-AIG, is working to address this through an in-depth needs assessment of the digital library community to determine desired functionality for the construction of a reuse assessment toolkit.

The development of well-defined functional requirements and use cases will serve as building blocks that go beyond use and focus on transformation. The first step of the Developing a Framework for Measuring Reuse of Digital Objects project involved a survey identifying how cultural heritage organizations currently assess digital library reuse, barriers to assessing reuse, and community priorities for potential solutions and next steps.

## Survey and Responses

- 19 questions, 10 core [3]
- 409 surveys started
- 302 surveys analyzed
- 130 respondents answered all questions
- 30% of respondents from institutions serving under-represented groups

## Supporting Reuse

In order to implement reuse assessment, respondents most commonly reported the need for the following supports: "documented standards and best practices" (14.86%), "personnel" (12.8%), "online tutorials" (12.06%), "open source tools" (11.78%), and "money" (11.68%). Additionally, respondents commented in a free text question that "research in the validity of such measurements" would be important as well as "easily implemented systems" and "better tracking tools for our implemented persistent IDs (handles, DOI)." Personnel was the most consistently rated high-need support across institutions.

### **Measuring Use**

data-collection tools.

#### Most common use statistics gathered (n=206)



#### Top reasons for not collecting use statistics (n=51)



#### Reasons for collecting use statistics (n=208)



Other:

Elizabeth Joan Kelly, Caroline Muglia, Genya O'Gara, Ayla Stein, Santi Thompson, Liz Woolcott

80% of respondents reported collecting use statistics. Google Analytics and platform specific statistics were the most commonly used

# **Measuring Reuse**

40% of respondents indicated that they collected reuse statistics.

#### Most common reuse data collected (n=92)



#### Top Reasons for not collecting reuse data (n=142)



#### Most common methods for collecting reuse data (n=95)





### Barriers to assessment

- Absence of professional standards in the field
- Lack of staff, time, and resources to pursue robust assessment activities
- Inability to interpret and understand data due to a lack of training, understanding of statistics and data, and reliable measurements
- High degree of difference in system-supplied assessment data generated by organizational content management systems and assessment tools like Google Analytics, combined with a lack of knowledge about which data to rely on
- Difficulty of assessing content across platforms with available tools
- Lack of knowledge as to whether information gathered was valid or reliably interpreted
- Concern about not knowing how to turn assessment data into actionable information
- Concern that collected data may not be used or appreciated by upper administration and may even be seen as a waste of time

### Progress

Data from the survey has been used to inform the continued work of the project. The survey results have thus far helped in developing discussion topics for the focus groups such as refining definitions and examples of use and reuse; determining necessary technology and standards for a reuse toolkit; and examining the cultural and ethical implications of reuse assessment. Data from the survey and focus groups will be used to create use cases which will then be assessed in terms of usefulness via a follow-up survey.

Published in physical media

20.7%

### References

[1] K. K. Matusiak, "Perceptions of usability and usefulness of digital libraries," Journal Of Humanities & Arts Computing: A Journal Of Digital Humanities, vol. 6, no. <sup>1/2</sup>, pp. 133-147, 2012.

[2] S. Thompson et al., "Surveying the Landscape: Use and Usability Assessment of Digital Libraries," Digital Library Federation Assessment Interest Group, 2015. Available: https://osf.io/9nbgg

[3] S. Thompson et al., "Developing a Framework for Measuring Reuse of Digital Objects A Survey," Digital Library Federation Assessment Interest Group, 2015. Available: https://osf.io/ptvh5/