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Beyond Google Analytics: Using the ‘Toolkit for the Impact of Digitised Scholarly Resources’ to embed metrics and gauge use of regional digital collections

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Introduction

Recently, Kent State University Libraries has been expanding digital collections, in particular highlighting content from the regional library collections. As the digital collections continue to grow, our team wanted to find a way to apply defined metrics to ascertain the use of digital resources through qualitative and quantitative methods, in a more extensive and comprehensive method than Google Analytics. This paper will present the construction of metrics to analyze the use (and reuse) of the digital collections with a number of open-source tools.

Project

Like many other institutions, Kent State University (KSU) Libraries hosts digital collections on a variety of different platforms. Content resides on four different platforms, with the majority of digital collections hosted on the Kent State Digital Commons instance and Omeka site. Digital Commons hosts faculty publications, open access journals from KSU, academic community output (department, institute, etc.), image galleries and events/conferences. On the other hand, Omeka, Internet Archive and Veridian host content from the Special Collections and Archives department at the main library. We are looking for a method to embed a set of defined metrics to assist in collection development decisions in this project, and to serve as a way to capture usage statistics. The objective with a metrics project is to track usage of selected digital collections, and also find a way to create a sustainable framework to apply to new projects.

It was important to our team at the onset of the project to not only define a set of metrics, but also correlate these needs with the appropriate tools. We quickly realized the metrics which we wanted to capture go beyond simple statistics, and required the use of more than just one tool, blending qualitative and quantitative methods. We also acknowledged that there are many methods to gauge use of digital content, but also felt that we needed to define some qualitative ways to interpret the data. Simple download statistics and site visits do not capture how content from digital collections are being used and re-used throughout other avenues of research.

First, we will provide a little background information about our institution. Kent State University is an eight-campus system with seven regional campuses in six counties, in addition to the main campus in Kent, Ohio. The regional libraries in the Kent campus network host a variety of specializations and disciplines that are not present on the main campus (Ashtabula campus hosts the state's only wine degree, for example), and our team is seeking to highlight these diverse features with an online identity in digital collections. In a 2014 article, Pampaloni and Bird discuss the idea of creating digital branches, by finding ways to identify what users need access to most regularly online and how electronic access can fulfill this need. To most effectively accomplish this goal, we must then find and define an appropriate set of metrics to illustrate to this need of openly accessible collection, and also create a way to track usage. In particular, regional library digital collections content is being sought out at the Kent State University Libraries within the academic community facet in the Digital Commons instance.

In chapter 5 of "Evaluating and Measuring the Value, Use and Impact of Digital Collections" in (2012), Ben Showers outlines a method to embed metrics, when he states "This process of embedding acts as a metric for the success of the impact analysis and practices that will be established by the projects, and can be used as a reference point for the ongoing analysis that resources will undertake" (p. 67). In this regard, we wanted the metrics to be in place before the collection is published, and therefore become a factor that is

present at the onset of a project. As budgets are tightened and public service hours are decreased, it becomes paramount to increase the potential of off-hours access and concurrently provide meaningful statistics to support this shift in ideology of libraries. In the introduction chapter of the same title, Lorna Hughes poses the question of how these attributes can be measured, and whether we can then apply these resulting statistics to then indicate use, value and impact. Further, in 2008, the LAIRAH Study looked at how digital humanities digital collections were used (or not used), in part through a workshop to see how users discover and use digital media. The author used a mix of qualitative and quantitative means for the study, and used log data to look at facets such as IP address and number of pages browsed in particular collections, but also asked users directly through a hands on workshops to provide insights on how users search and access collections.

Through the initial exercise of creating a template for desired metrics (as listed below), we also had to acknowledge the differences in the regional library structure as compared to the main campus operation. For example, the regional libraries at Kent have limited staff, with a few full-time employees running all of the main functions of the library. The library director of a regional campus may also perform marketing and communications, webmaster, collection development, reference and other roles in addition to their administrative duties. The regional campuses offer different programs of study and learning experiences--curricular and extracurricular--that we would like to highlight virtually through new digital collections. Patron demographics vary, too, as regional campus students and library users may be career changers and non-traditional learners. As such, their needs may differ from that of the average student seeking library services at the main campus. Pampaloni and Bird urge smaller libraries to create a digital representation of those resources that will best serve their patron base outside of regular library hours. The objective in our project was to provide a way to capture metrics that highlight the content of the regional libraries and accurately represent the use of regional campus digital collections. For example, with the use of one particular defined metric, we will be able to determine through IP address tracking as to where the majority of the users for that collections are from geographically. Admittedly, this is not a perfect science for a number of reasons including savvy users who have blocked or misrepresented the IP address, however we are focusing on the majority of the users who have not blocked IP in this particular tactic.

Defined metrics

Sustainability
Web mention analysis
Blog analysis
Link Impact Report
Audience Analysis
Usage
Pageviews
Unique Pageviews
Average Time spent on page
Bounce Rate

Percentage Exit
Link analysis
Citation analysis
Content Analysis
Referrer Analysis
PlumX / AltMetrics
Track user behavior on webpage
Access/Discoverability
Referring Site(s)
Log file analysis
Social media analysis
Originating location of user
Analyze keywords

As the first step, we looked to define what kinds of information would be captured, and then chose a corresponding tool that can complete the task. The main factors that our team identified were of the quantitative variety (How many downloads, hits, etc.) and then the qualitative, as in how are our digital assets being used and cited outside of the digital repository, and how are users coming to find our digital collections? And further, how can we use this information to help identify future projects through meaningful metrics? And even further, how can we also track the marketing and promotional activities of digital collections in conjunction with the captured information? The Toolkit for the Impact of Digitised Scholarly Resources proved to be a great resource to find the necessary tools for the project. The toolkit was originally hosted and developed by the Oxford Internet Institute in 2008, and is regularly updated. The toolkit provided a method to match the desired metrics with correlating tools, such as Google Analytics, Webometric Analyst, Open Web Analytics and PlumX. Further, the toolkit provides a framework and set of best practices for measuring usage and image of digital scholarly resources. The toolkit therefore assisted in creating a set of metrics for the project.

The template of metrics is outlined with the following categories: Sustainability, usage, and access/discoverability. In the initial discussions, we also realized that the idea of value in metrics is somewhat problematic and subjective. Simple web analytics do not qualify the use of digital media, and by having openly accessible digital collections, we wanted to have measurements in place, and also include a method for regular data analysis and track on-going promotional tactics. Once the set of metrics are in place, we will run a bi-monthly analysis to review usages logs and other analytics in a blended quantitative and qualitative method. We will also need to determine the goals and benchmarks for success. As well, we will also look to reuse this template of metrics for new digital collections from regional libraries. The poster will highlight the selected metrics and outline the method to run the analysis on a monthly basis, while also tracking important information about how promotional and marketing methods can impact statistics. At the completion of the pilot year, the resulting information will be compiled for the purpose of reporting and provide transparency for the repository contributors.

References

Hughes, Lorna M. (ed.) *Evaluating and measuring the value, use and impact of digital collections*. London: Facet Publishing, 2012.

Pampaloni, A.M. and N. J. Bird. "Building Relationships through a Digital Branch Library: Finding the Community in Community College Library Websites." *Community College Journal of Research and Practice* 38.2 (2014): 1125-1141.

Thelwall, M. *Introduction to Webometrics: Quantitative Web Research for the Social Sciences*. San Rafael, CA: Morgan & Claypool, 2009.

Warwick, Claire, Melissa Terras, Paul Huntington and Nikoleta Pappa. "If You Build It Will They Come? The LAIRAH Study : Quantifying the Use of Online Resources in the Arts and Humanities through Statistical Analysis of User Log Data." *Literary and Linguistic Computing* 23.1 (2008): 85-102.