

The UC Publication Management System: Fulfilling the Promise of UC's Open Access Policies

Problem and Goals

University of California-affiliated research publications account for a notable percentage of the world's scholarly published work. A significant portion of that highly sought-after research, however, is locked behind publisher paywalls, inaccessible to global communities who might benefit substantially from the discoveries, innovations and critical inquiry therein. In fulfillment of its public service mission as a land-grant institution, the University of California (UC) has taken steps to reverse this situation, most significantly through the adoption of several open access policies, including the [UC Academic Senate Policy](#) (covering all Senate faculty) and the [Presidential Policy](#) (extending coverage to include all UC employees who author scholarly works). These policies enable UC authors to ensure that their research is publicly available by granting them the right to distribute their published scholarly articles via eScholarship (<http://escholarship.org>), UC's open access repository. The trick? To enable authors to deposit these publications in eScholarship with minimal effort.

Upon adoption of its policy in July 2013, the Academic Senate charged the California Digital Library (housed in the UC Office of the President) and the ten UC Campus Libraries with the implementation of the policy and set clear expectations for ease-of-use:

"The Faculty calls upon the Academic Senate and the University of California to develop and monitor mechanisms that would render implementation and compliance with the policy as convenient for the Faculty as possible."

Our ambition for this project was thus to work with the UC campuses to create a centralized infrastructure for supporting the policies that was efficient, scalable, automated, and tuned to the specific needs and requirements of the Senate faculty -- and to achieve all this in a setting of minimal staffing availability within the libraries.

Our Solution and Project Timeframe

Implementing the UC Open Access policies across 10 campuses with limited resources required developing an infrastructure to automatically identify publications falling under the policies and to facilitate deposit of appropriate associated articles into eScholarship.

While most other OA-policy institutions rely on librarians and student workers to manually gather and comb through CVs to accomplish the work of collecting publications, UC's sheer size (an order of magnitude greater than most of its peer institutions) and limited staff capacity demanded that automation be a core component of any solution. To that end, we purchased Symplectic Elements, a Current Research Information System (CRIS) that programmatically harvests publication records of authors from an extensive list of data sources. The UC Publication Management System is our enterprise-wide deployment of Elements and is among the first such systems used for an institutional open access policy in North America.

Elements uses faculty HR data (names, email addresses, titles, departmental affiliation, etc.) to query publication indexes on a regular basis, sending out automatic email notifications to faculty when new publications are

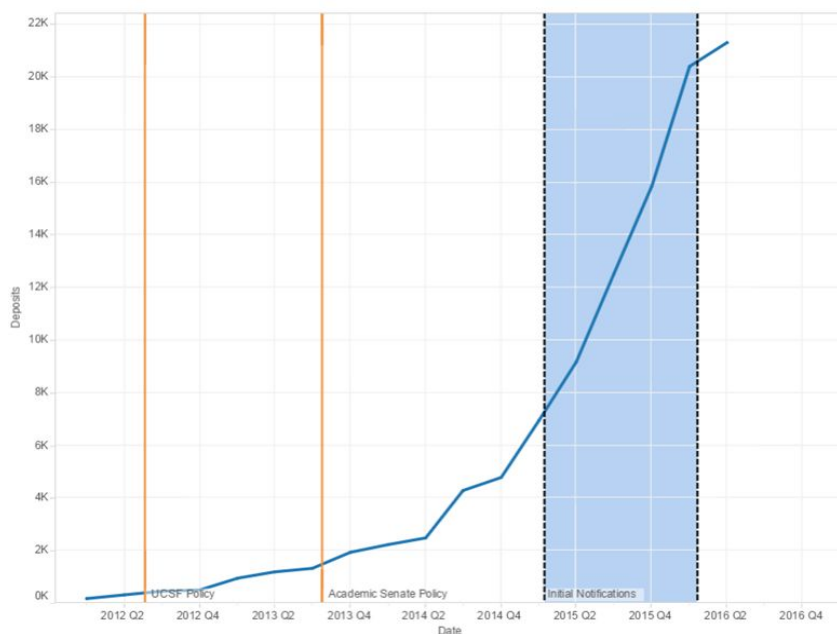
discovered. Faculty simply click on a link in the email, which takes them into their Elements profile page where they can claim publications and upload an associated document that is then deposited into eScholarship. From the end user's perspective, the process is relatively seamless and quick: claiming, uploading and subsequently viewing the article in eScholarship takes just a minute or two.

Work on the UC Publication Management System began in the Summer of 2014, immediately following purchase of the Elements license, with the Pilot campus rollout finishing in Q1 2015 and the seven remaining campuses finishing in Q1 2016. We anticipate a similar rollout of small groupings of campuses for the Presidential Policy, beginning either in Fall 2016 or Spring 2017.

Impact on Users

Soon after the adoption of the UC Academic Senate Policy, the CDL developed an interim manual deposit process to allow Senate faculty to participate in their policy while a more robust system was being developed. Despite efforts to streamline author input of publication metadata, the manual workflow relied on what felt to faculty like a burdensome level of effort. Taking that feedback to heart, CDL aimed for and arrived at "a click and upload" experience.

Figure 1: Cumulative Deposits to eScholarship of UC OA Policy Publications



The UC Publication Management System requires a minimal amount of effort from faculty to comply with the policy and has, consequently, resulted in a dramatic rise in article deposits into eScholarship, shown in blue in Figure 1. The system also provides faculty with significant additional benefits in return, most notably the ability to manage and maintain a comprehensive list of their publications, including those not covered by the policy. Further integration of this system with campus-based tracking mechanisms could provide more efficiencies in the maintenance of faculty profiles, yearly reporting requirements, etc.

Measuring Success

The University Committee on Library and Scholarly Communication ([UCOLASC](#)) assessed the UC Publication Management system at the 6 month mark, based on [a report from CDL and the campus libraries](#), and determined that the success of pilot implementation preparations at UC Irvine, UCLA and UCSF justified continuing the work at those pilot campuses and rolling out the system to the remaining seven campuses. The [12 month report](#) addressed

the completed deployment and included indicators demonstrating success across key assessment areas, as summarized below.

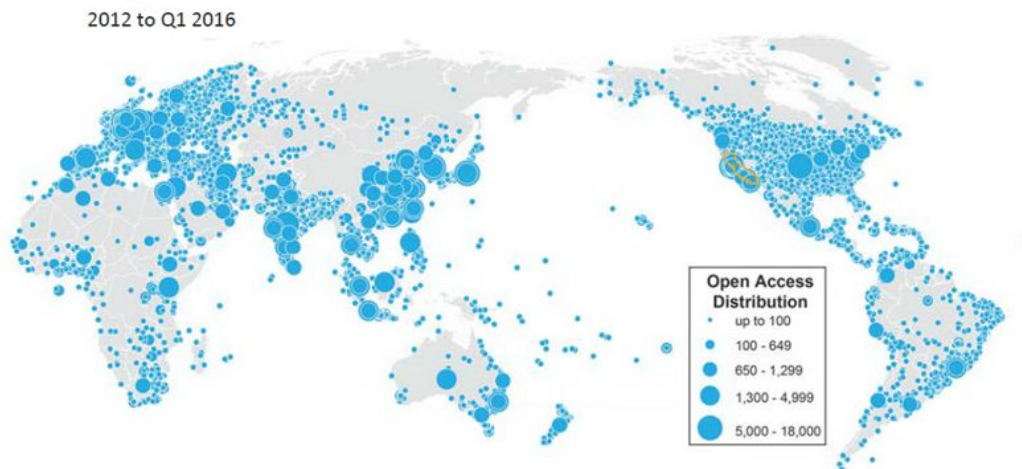
OA Policy Participation Levels

Automated email notifications are sent to faculty when newly harvested publications records are found and available for verification. Just over 43% of those receiving notifications login to the system (a significantly high response rate); almost 94% of those who log in take some action in the system; and almost half of those who take action have actually deposited a publication or provided a URL to an openly accessible copy of the publication. **This level of activity has resulted in the deposit of over 21,000 new publications into eScholarship since January 2015.**

Article Usage Data

A primary goal of the policy is to make UC faculty scholarship widely available to individuals around the globe who might not otherwise have access to it. The presence of these publications in eScholarship has effectively accomplished this, as demonstrated by Figure 2 below, a map of the geographic distribution of views and downloads of deposited articles covered under UC's open access policies.

Figure 2: Global Distribution of Requests for UC OA Policy Publications in eScholarship



User Satisfaction

A brief survey was presented to users of the UC Publication Management System upon successful deposit of an article in accordance with the OA Policy between August 11th and September 30th, 2015. Of the 88 unique respondents, 92% indicated that they were either very or somewhat likely to use the system to deposit another publication in the future. 56% rated the experience as somewhat or much easier than expected, while 32% indicated that the deposit experience was "about what they expected." 66% of respondents were either somewhat or very familiar with the OA policies. Overall, results suggest that faculty who are familiar with the policies and are depositing articles find the system beneficial and plan to continue utilizing it to participate in the policy:

"I think that I have all my publications up there already. I did this week before last. It was really straight forward....I must say, I think that the open access platform looks great. Thanks to you and your colleagues for making this happen."

--Sean Walsh, Assistant Professor, Department of Logic and Philosophy of Science, University of California, Irvine

Collaboration

The UC PMS rollout and continued operation have been collaborative efforts by preference and necessity. While provision and customizations of the application itself are most efficiently achieved as a centralized service, outreach to faculty and local stakeholders, first line support to end users, and coordination with campus departments such as academic personnel and identity management groups are best accomplished by local campus staff. Working together to identify clear roles, required tasks, and appropriate divisions of labor enabled CDL and campus implementation staff to act as one networked, agile, responsive team, maximizing the advantages of each. Without the CDL, campuses would have been left to install and run the software on their own, at the expense of significant time and money. Without campus partners, CDL would have encountered tremendous challenges connecting with the appropriate campus groups to actually populate the UC PMS with the necessary faculty data, implementing single sign-on, and more critically, would not have been able to personally reach the many thousands of faculty members across UC for whom this system is intended.

The scale of this effort, the need for support from across many different campus and system departments and groups, and the high visibility of the open access policies helped generate a shared purpose and drive among project partners. Campuses that rolled out earlier in the phased sequences saw themselves as "early adopters" and shared best practices and lessons learned with campuses coming aboard later, such as UC Berkeley:

"Supporting faculty participation in the UC Open Access Policy is a high priority for the UC Berkeley Library, but was a daunting task to contemplate tackling on our own. Using the UC Open Access Policy System on our campus allows us to provide a powerful platform with substantially less staff time and cost than would have been required had we attempted this independently. Our rollout was quite smooth, thanks to the experience of CDL and other UC campus OA teams, and now our faculty can easily share their publications with a worldwide audience."

--Margaret Phillips, Education Librarian, Gender & Women's Studies Librarian, UC Berkeley

Technical Component Summary

- Symplectic Elements, the vendor provided CRIS, drives the system through automated publication record harvesting and has been rolled out to the UC community as the [UC Publication Management System](#). In both the QA and Production instances, one server provides the actual application to all users, with campus level visual and feature customizations resulting in virtual separate campus implementations that have unique branding, color schemes, help text and email notification design layout.
- The [Office of Scholarly Communications](#) provides information and guidance to the UC community regarding scholarly communication issues. A website designed and maintained by the CDL, this site also provides a

waiver and embargo generator for those faculty required by journal publishers to provide proof that either of those options will be honored.

- [eScholarship](#) is UC's open access repository and is the destination of the publication records claimed by faculty and the associated documents they upload. eScholarship is a homegrown system built and maintained by the CDL, and also provides free publishing services to UC affiliated scholars.
- Campus HR systems and local publication repositories provide data required for the basic and enhanced operation of Elements. HR systems generate monthly feeds of updated data about faculty, including name, email address, department and title code. Some campuses also have local repositories maintaining some faculty publication information, for instance [Profiles](#) at UCSF and [MyData](#) at UC Irvine.

Project Team Members

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