

Revisioning Archival Discovery: User-Centered Collaboration

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Introduction

In late-2021, two public services-focused archivist-librarians developed and spearheaded a cross functional project to assess ArcLight as a potential replacement for Harvard Library's current finding aid discovery and access user interface (UI). The project, completed in Fall 2022, consisted of four workstreams: the development of functional requirements for an optimal discovery system, user testing of wireframes for an ideal interface, review of peer institution use of ArcLight, and testing of the system with Harvard Library data in a sandbox environment.

Project co-leads intentionally included a broad project team – as well as peers outside the walls of our institution – as a means of strengthening existing partnerships and developing new relationships. Engaging staff from technology services, technical services, user research, and public services, the project team selection also ensured the fullest possible representation of in-house skillsets, expertise, and perspectives.

The collaborative, iterative nature of the user testing and cross-library feedback that informed our final recommendations will be shared as a model for developing user-centered systems that build on the expertise of staff serving in a variety of roles at multiple institutions. Without an existing “plug and play” UI that supports both collections and users, our profession must think more broadly, flexibly, and creatively about how to improve visibility, discoverability, and access to archival materials, pushing these cross-functional partnerships forward and ensuring that all voices are included.

Background

In 2017, we were appointed to a newly formed working group tasked with replacing Harvard's homegrown finding aid discovery interface, OASIS, with the ArchivesSpace public user interface, or PUI. This group, composed of public services staff from several of Harvard's 30+ special collections libraries/archives as well as a liaison to Harvard Library Technology Services (LTS), prioritized user testing to inform development of the PUI before the scheduled July 2018 implementation.

When we conducted user testing on the out-of-the-box PUI, participants told us that the user interface was overwhelming, difficult to read, and didn't feel like a finding aid site. This last point is difficult feedback on which to act when we are continually trying to balance the needs of advanced and novice users, who, at the time, we thought may benefit from direct access to individual collection components – the exploded finding aid concept. However, connected to that finding, and something we have since heard repeatedly, was the concept that users, all users, were missing context.

While this undertaking produced a wealth of information, we were only a few months from the end-of-life for OASIS and needed to focus on the issues that would most improve the user experience, so our partners in LTS prioritized work to enhance the PUI's legibility and accessibility. The resulting site, now

known as [HOLLIS for Archival Discovery](#)¹, represented a minimally viable product that participants acknowledged would need to be developed over time based on iterative testing and staff and researcher experience.

Between 2018 and 2020, our working group, of which we eventually became co-chairs, focused on continuing to learn more about user needs and experiences with the UI. This included conducting a staff survey to enhance understanding of their experiences with the PUI, partnering with LTS to further improve site accessibility, and testing and launching a requesting plug-in for Aeon at Harvard (known as HOLLIS Special Request). Even as we gathered feedback and made incremental improvements, we were aware there were still fundamental issues that made the site, and thus the collections, difficult to navigate and understand.

2021 – Archival Discovery Research Study

In 2021, the working group collaborated with Harvard's User Research Center (URC) to develop a user study designed to assess the efficacy of the 3-year-old interface and to learn what worked for and against our novice and more experienced users. Two different approaches were utilized: a survey sent to six very experienced faculty users and interviews conducted with 11 researchers including primarily undergrads with some familiarity with archives.

We learned that users of all backgrounds struggle to engage with the current UI. The interface and archival jargon over-complicate an already complicated concept and make users feel like they need to be “insiders” to access materials. Users told us that they want to find everything and don't want to be limited to only what is available online – including undergraduate students. Unfortunately, a large number expressed a lack of confidence that they have found all relevant materials upon conducting searches in the PUI and told us that they rely on archivists/librarians for assurance that they have conducted a complete search – or sometimes choose to give up.

We also confirmed that finding aids need to be restructured. Three main takeaways rose to the surface in this round of testing. First, users want simplified layout and navigation. Second, tabbed layouts aren't effective and in fact, users often overlook the tabs when using the PUI. Third, the item or archival object pages feel like “dead ends” to users. When they don't see more information, clear action buttons, or the content of the folder, they aren't sure why the link exists.

Based on existing evidence and what we learned from this study, it was clear that finding aids need to be designed to better represent context – reconnecting items to the larger collection and stepping back from the fully exploded data model. Features like tabs, complex navigation menu behaviors, and “dead

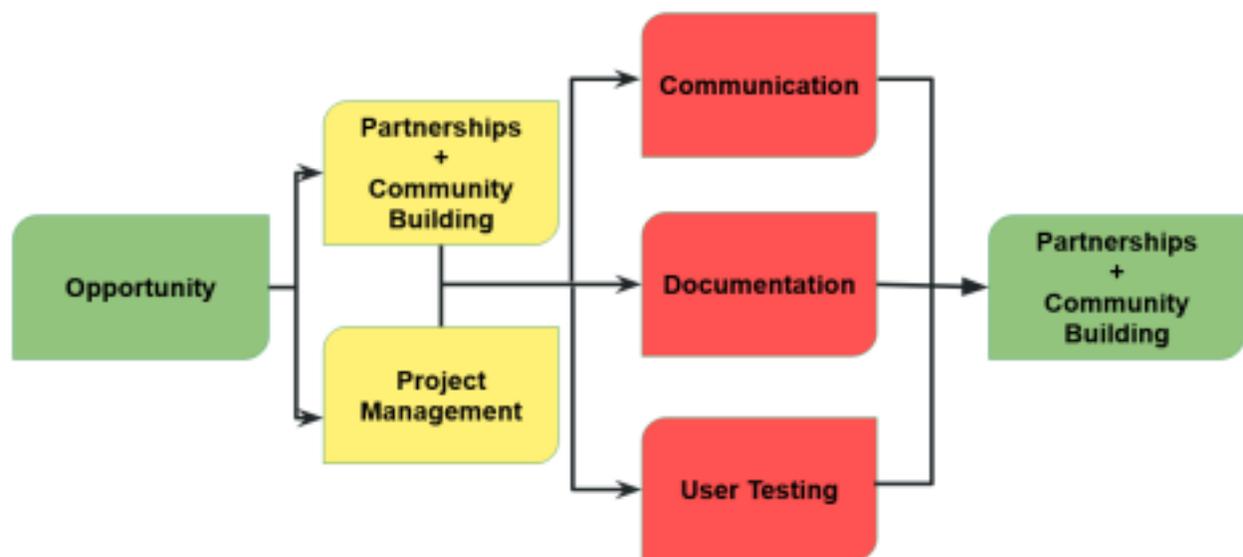
¹ As of November 2023, this is the URL for Harvard's instance of the ArchivesSpace public user interface. The URL may direct to an alternative platform in the future.

end” links distract/detract from the discovery process and cause users to ask more questions about the interface than about our collections.

2022 – ArcLight Assessment Project

Following the 2021 user testing and in our roles as co-chairs of the working group, we engaged with Library administration, technical services and library technology (LTS) staff, and other stakeholders about the need for improved archival discovery systems. As the conversation developed, participants coalesced around an exploration of ArcLight as a potential open-source solution built using BlackLight, in which LTS staff have expertise. Our initiative led to the opportunity for us to manage the ArcLight User Interface Assessment Project (AUIAP).

Co-leading the AUIAP was no small undertaking, in part because it has not been typical for public services staff to lead a systems-based project. We were intentional about building a cross-functional team, including staff from technical services, library technology (LTS), and public services. As we developed the project plan, we determined that testing the design and functionality of an ideal interface would be one of the main workstreams.



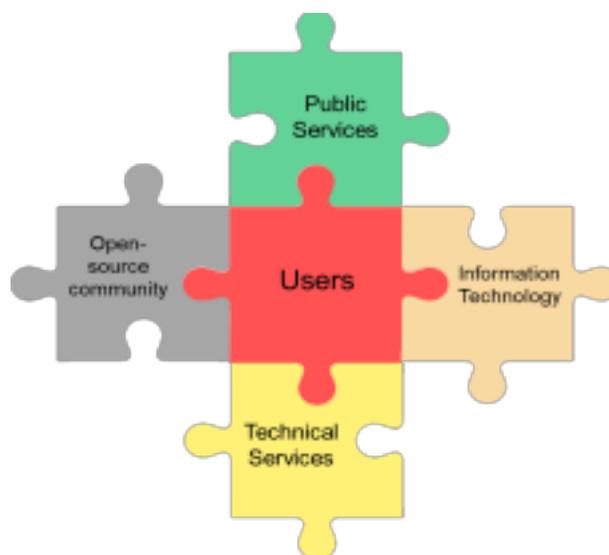
In addition to reviewing past user testing on the current PUI, the project team documented advantages and disadvantages to the existing ArcLight UIs and met with colleagues developing ArcLight (v.0.5 at the time) at Stanford, Duke, and Princeton. Based on that information and the main issues raised in past UX studies, we reached out once again to our URC partners to talk about how this UX study could be designed and structured. We sketched out, revised, and developed wireframes – static illustrations – of an ideal interface. The designs utilized functionality built into ArcLight, such as the grouping of search results by collection, and incorporated feedback from our users on the need for a more dynamic inventory view that highlights the context and structure of a collection. The URC staff developed an interview script with the project team’s input and we recruited and interviewed 10 people from a mix of staff, students, and external researchers.

Of note, the feedback on the wireframes was more balanced, not primarily negative as we had seen with previous user testing on the PUI. Although the wireframes are not perfect, evidence shows that this

concept and subsequent revisions are getting us closer to a more intuitive design. The wireframes are available in the final [ArcLight project report](#).

Repeated rounds of user testing, over more than six years and using different approaches, have served to capture what users need in particular moments and over time. Additionally, each round has created opportunities for collaboration and relationship building with colleagues across public and technical services and IT, and colleagues at other repositories across the field. The work we all do is wonderfully complex and the same is true of how users interact with archives. Through more collaborative efforts, including all interested parties in the process, we can better position our field to develop increasingly intuitive and usable systems.

Conclusion



Harvard continues to scope out a plan for implementing ArcLight, and we look forward to furthering these conversations both within Harvard Library and across institutions. As more institutions are developing and launching ArcLight, the product is evolving along with the user community. The benefit of open-source software lies in the ability of stakeholders representing diverse interests to advocate for functionality that can meet a range of needs. The challenge is creating a program that enables participants to reach consensus.

Since launching the ArchivesSpace PUI, we have struggled with questions surrounding how to develop an interface that effectively responds to user feedback but is not so heavily customized that it is unsustainable to maintain. Harvard's ongoing user testing has certainly steered development, but it has also informed our approach to systems as tools. While in many ways, we've been heartened to hear that users would simply "ask a librarian" when they hit a dead end in the ArchivesSpace PUI, this cannot and should not be the only solution. We recognize that there will never be a perfect system that exactly meets all user needs now and as research practices evolve, so there also needs to be a focus on how archivists, librarians, and developers interact with the interfaces we create. How are libraries deploying archival discovery systems? How are staff trained? Is documentation available? What outreach is

necessary?

Public services is only one component of an interconnected model that requires continual input from technical services, technology services, and the open-source community. The people who represent each of these pieces will necessarily have their own priorities. As a profession, we need to think critically about how to more effectively balance these perspectives moving forward. Our experience leads us to believe that when development is grounded in a collaborative approach that acknowledges the primacy of the user we will create more effective ecosystems for archival discovery.