Experimental Access to Digital Collections and Data
User Research Report
April 8, 2021
15 interviews, 302 pages of transcripts, 188 data points, 10 themes. This report outlines the findings of our project. There is a fair bit in here that will likely need to be addressed at some level—we were, after all, looking for things to create or improve.

It was interesting hearing what the participants had to say. We think that, while there is a fair bit in this document, the bulk of it is relatively straightforward to address, though it will take some time to address everything. That’s what prioritization is for!

This document is organized from a high- to a detailed-level. Likely everyone will be interested in the Big Takeaways. Leadership will be interested in the Theme Summaries. And surely someone will be interested in all 188 data points we collected.
Probably I wouldn’t have [gone to the LoC website] to be honest because the material that I have to work with, my weather data, my earthquake data, that’s really enough for the class.

I wouldn’t have looked unless a student said, “Hey, where else could I get information from?” And then I would have gone off on a search.

And I don’t know that this... It wouldn’t have occurred to me to go to the Library of Congress for this kind of information, but definitely now it will. I think part of that is, I don’t know, I think this assumption that, Library of Congress that’s, I don’t know how updated that’s going to be.

I don’t know if it’s going to have information that’s really relevant to data sets of what my kids are you know, so it wouldn't have popped to mind. So this is exciting to see that. Yeah. Hey, there’s some really relevant information at my fingertips here.

Patricia, Home School Teacher
00 Big Takeaways

These are the big takeaways we heard most often across all the interviews. These are issues that came up frequently and with almost everyone we talked with.
Awareness, Consideration, Action

Whichever terms are used, and however many layers of a Marketing Funnel exist, all of the participants sit far away from Action. Their awareness stretches from “heard of it” to “visited the library once or twice.” None of them think about the Library on a regular basis.

A large part of the challenge of engaging with people, like those we spoke to for this study, is a basic Marketing problem. This will not be news to you, but it is good to validate. We’ll dive in a bit deeper below on some of the Marketing-related issues as well as recommendations.

“ My perceptions of it are that it’s a necessary ... It's preserving American something. I don't know exactly. Or that it's cataloging or something. But I feel like it's probably a very crucial, necessary aspect of cataloging American knowledge and culture. Other than that, I don't really know what.
Today Problems vs Tomorrow Problems

Every participant, in all 4 segments, spends the bulk of their time solving Today Problems. They have a class assignment to finish. They have a news article to contribute to. They have a class to teach. They have a client who needs a place to live.

This Today Problem title comes from a participant (quote below), but is reflected by all of the participants. The Library exists in the Tomorrow Problem space. How do we bridge that gap? More on that in Themes & Recommendations below.

"And you may need an answer today, like I need to support this client today with this issue. They may not have the time to get back to me today. For them, that might be a tomorrow problem, and for me, it’s a today problem."
No Time for Creation

There was a mix of feedback about the Labs site. It mostly skewed positive, but when asked if they could see themselves making anything like it, the answer was no. Primarily because they don't have time.

“...I don't do interactive stuff. I mean, it's very one way. ...My stuff is I communicate, I take whatever it is that's out there that I want to impart to people and I do it and I try to do it well and I move on. I mean, I certainly don't build apps for interactive who knows what? The New York Times had people for that.”
Creative Undergrad Students... Not so much.

We are researchers, not dentists! Talking with the Undergrads, for the most part, was like pulling teeth. While we know there are Undergrads who push themselves and create interesting things beyond what is required, none of that type showed up for these sessions.

Each student talked about doing the bare minimum (not specifically their words) to get through a class and move on to the next one. This group was the least interested in making things in order to learn and share.

While it may be interesting to keep talking with Data Journalists, Teachers, and Activists/Community Leaders, we suggest not talking with Undergrads. They had very little of interest to say. They may be consumers, but not creator
This section outlines recommended next steps from the User Researcher’s perspective — both short- and longer-term. These will be considered further in subsequent phases.
This concept, Cross Brand Collaboration, may address the Collaboration, Creation, Impact, Local, Marketing, and Trust themes (6 out of 10).

There is a trend over the past few years where two brands (companies and/or people) collaborate. Virgin Atlantic X OnePiece, Saucony X Dunkin', and ASOS x glaad, for example.

As noted in the report below, there was very little interest from participants around the idea of using the Library's digital collection to create anything—they just don't have the time. But if any one of the segments are interesting to the Library, why not engage with someone well known in that segment to collaborate on a project?

- LoC X Thandiwe Abdullah, activist
- LoC X Amanda Cox, data journalism
- LoC X Tabatha Rosproy, teacher

A subset of the Labs team could work with each of these people to outline a project, then build it together. The final project could be shared, but the behind-the-scenes story is likely what might drive others in these professions to take part as well.
SWOT

The Labs team should conduct a Strengths, Weaknesses, Opportunities, and Threats workshop. After that, mitigation plans should be created to address the WOT parts of the analysis. This analysis will generate more action items than can be quickly addressed, but there should be an understanding of what will be addressed and what won’t (and why). This should be run every year with mitigation plans updated once a month.
More Research Needed

The rest of the roles identified early on should be looked at as well, with a more discerning eye based on what we learned in this study.

The interviews with the University Students were not very revealing. It was helpful to talk to them in order to gain this understanding, but future segments should be looked at with University Students in mind. Do the future segments produce work for external people or organizations? Or do they produce work for an audience of, essentially, one—a professor?
These summaries are in alphabetical order by theme. We have identified many issues per theme (see Theme Details below) as well as some recommendations.

These themes and recommendations should be looked at by the core team and prioritized.
**Access**

**Theme definition:** Being able to gain access to the accurate information they need, when they need it.

Participants expressed experiencing many barriers to accessing the information they need on a day-to-day basis. This can be digital crime data held by local law enforcement or services needed to help clients get a shower. At different levels, depending on the participant’s segment, there was a sense that this is one of the top issues they face.

Collecting the sites and services that are actually of use to them is an ongoing process. Part of the list lives in bookmarks or documentation, but isn’t easily shareable.

Access is related to Marketing (see below) in that one must first be aware there is data and information to use, but distinct enough that it warranted its own theme.

**Recommendation**

- Investigate what the Library can do to increase access to data and information. Both an increase in what is available as well as different ways of engaging. This is partially addressed with LC for Robots, but for non-programmers, there will need to be an interface(s) for interrogating the data.
Ask A Librarian

**Theme definition:** Connecting with a human for help.

Participants from the 3 primary segments mentioned the desire to get answers from a person, particularly when they are stuck. What can the Library do to be a source for answers? Is the Library empowered to make FOIA requests and then share the information? Can it be a place for certain organizations to house and share their support capabilities?

If I have a question, maybe some of the functionality of the Scratch platform, for instance, and I shoot off a question to the help desk, their version of the help desk. It could be a long time before, before that question is scooped up and answered. Sometimes it can be really quick. But often, I'll get somebody who just kind of routes me back to the FAQ section of the site that I've been to already.

**Recommendations**

- This was the theme with the least amount of data points, but it was still enough to stand out. If it is not already being discussed, it’s likely worth doing so.
- Use [Google Trends](https://www.google.com/trends), for example, to stay somewhat ahead of what people are interested in, then create collections that address that topic.
Theme definition: Working with others to accomplish their goals.

Participants expressed how valuable it can be to collaborate with others. While challenges abound, there was a sense that the collaboration makes the work easier, fun, and more impactful. There are very few professions where there is little-to-no collaboration.

The collaboration isn’t solely within the profession either. Each participant mentioned needing to work with individuals and organizations outside, but related to, their profession.

...our agency recently rolled out this new evidence-based practice that all the programs across the whole agency and all the counties are rolling out. So, that’s why I want it to be more manualized, generalized. It’s called Collaborative Documentation. So, it’s where you help your families not only how have a voice in the documentation you’re writing about them and the notes that you’re writing. So, they can see it.

Recommendation

- Research ways to support collaboration. For example, can there be shared, personalized Collections? Can those Collections be subcategorized, contextualized, and shared with specific audiences?
Creation

Theme definition: Creating things for others to interact with or be changed by.

Everyone mentioned creating something (a manual, a report, a learning opportunity) as a primary activity in their profession. Most of them are creating artifacts which solve the issue in front of them (see Today Problems below).

That said, much of what they mentioned would likely help their future selves, or others who come after them. We got a sense that keeping track of what they create, and keeping it relevant as things change, is a part-time job in itself.

There may be some opportunities to meet people where they are at, rather than bring them to the Library. This is likely also related to the Local theme (see below).

I have created something similar in the past. I created a lot of spreadsheets, but I created this huge spreadsheet that showed every legislator going back 40 years and exactly where their terms starts and ends and who picked it up and everything for every seat in the legislature in California. And that was a big research project I did to pull all that data.

Recommendations

- Allow for creating collections based on people’s needs. One teacher mentioned putting together a reading list for all ages on a specific theme.
- Allow people to share what they create through the Library. Apply some method of version control so that people can see how artifacts change over time.
- Work directly with people in the segments the Library wants to engage with in order to better understand how they may be served. Based on this study, start with Data Journalists and Teachers.
Impact

**Theme definition:** The good feeling that comes from having helped.

Being able to see you are having a positive impact on people is a big motivator for our participants and it’s not hard to see how that is true for most people. Creating and maintaining a system by which people can see their impact would go a long way to sustaining or increasing their motivation to stay engaged.

For one of the teachers, there is a question of, in which things should people be literate? People can be exposed to interesting things, but there are underlying requirements of people to know or learn certain things in order to have a bigger impact on them. What is that underlying literacy?

“ I was somebody who used data to either tell stories or make sure people in power weren't lying, to sort of backstop what I and the public were being told... You needed to disguise the data in certain ways... You have to do it in clear language. You want to put a face on it also. You want to remind people that all the numbers we write about either are people or matter to people. They derive their meaning from people's interests in them. And so, you need to cast them in a way that the reader can metabolize and can connect with.”
Impact

Recommendations

- Investigate ways to show how those who contribute to the Library’s (and Lab’s) mission is having a positive impact. This may manifest itself as “71 people have used your experiment,” or a “Collection/Creator of the Year” award. It doesn’t always have to be a big event, but it should be easy for everyone to see.
- Investigate what underlying things Library visitors need to be literate in to understand and engage with the Collections and Experiments.
Local

**Theme definition:** Connecting to local people, places, and events that help them meet their goals.

When prompted about where they go to find information, in addition to looking things up online, all participants mentioned using local resources. This could be a university or internal company library, the local public library, or local organizations who specialize in the data or information they are looking for.

The Local theme shares a bit of overlap with Access, Trust, and Today Problem. It’s about where they can go to get what they need and even in COVID-19 times, there is still a sense that a lot of what they can find is around their physical location.

There’s also a focus on finding data and information relevant to specific locations, even down to the neighborhood—likely, a local organization is going to have that information where the Library of Congress might not.

“Yeah, one of the places that I freelance with, the students are primarily black so the African American music thing stuck out to me initially because we work so much in the arts. One of the big things we do with the organization is trying to highlight the African American cultural music and arts and their impact on all of that. Just so that the curriculum is not so white washed, as it normally is. So that stuck out initially. So those music recordings and information on historical music was really cool. And just anything in the arts would be useful. Yeah, I don’t know. Any like photos or information about specific neighborhoods because a lot of times it’s about a specific community. So the pictures of D.C. architecture and things like that, that stood out as well.”
Local

Recommendations

- Investigate how to play a supporting role for local libraries. If people are drawn to those local resources, meet them where they are.
- Add searchable location metadata (such as ZIP Codes or Historic Places) to all items in the Digital Collection to allow people to find information that is relevant to a specific place.
Marketing

Theme definition: Marketing as a way to reduce the gap in people’s perception about LoC.

We asked all participants about their impression of the Library of Congress. A couple of participants had been to the physical library in the past, but most participants couldn’t confidently define what the Library of Congress is or does.

Many said something along the lines of it being an important repository, but most felt a disconnect between what they think of as a library (their local or university library) and the Library of Congress.

What became clear, interview after interview, is that the Library has an awareness problem (as mentioned in Big Takeaways above). In order to reach the people in the segments we spoke with, and listed during the kickoff, they need to be aware of the Library in the first place.

Is the Library of Congress a library or a repository? This is basically the gap in perception that marketing needs to overcome.

Recommendations

- Research and clearly define the segments with whom you want to connect the most and run a marketing campaign for them. That’s a broad-brush recommendation, but the particulars of the campaigns will depend on many constraints. The point here is: outreach is key.
- Grow the mailing list and use it, even if you have to buy lists.
- Merge the Library and Labs marketing resources for this—The Library seems to have a wider reach than the Lab does.
- See Big Takeaways for other recommendations.
Today Problem

Theme definition: A sense of urgency when dealing with the issue at hand.

Today problems get in the way of being able to give the time and attention necessary to create anything that isn’t absolutely necessary for meeting the immediate challenges.

The Library exists in the Tomorrow Problem space. While people have access to the resources on the site 24/7, they do not think about it or come across it when looking for data and information (see Marketing).

Packaging content in such a way that people can grab it and move on to the next problem of the day would go a long way to helping them. Collections do that to some extent now, but are not optimally organized (see Usability) and still require a fair amount of work to frame or reframe in the needed context.

The title of this theme came directly from a quote of one of the participants, but it was echoed by all of them.

“And you may need an answer today, like I need to support this client today with this issue. They may not have the time to get back to me today. For them, that might be a tomorrow problem, and for me, it’s a today problem.”

Recommendations

- Identify improvements to Search Engine Optimization (SEO) and to the site, related to Usability (below).
- Work with representatives of the primary segments to construct criteria for creating collections that are relevant and easily used in day-to-day work. Some overlap with Local here.
Trust

Theme definition: Trusting people, information, and sources.

People want trustworthy information. Finding it is difficult. Trusting what they find, unless they have direct experience with it, is also a challenge. The Library of Congress, and even local libraries, are in a position of some clout when it comes to trustworthiness. How can that be leveraged?

There is some overlap with Usability (below) with this theme. Many usability issues will erode trust.

Making the Library an easy to access source of reliable, useful data and information will go a long way to getting more people to engage.

"I know that there are people that I could name o□, journalists and things like that, that I could use as a trustable source that I've kind of watched for a while. ...I would just say that I would go with somebody that I trusted, or had formerly seen, or knew. Or with the organization as a whole someone that is trusted."

Recommendations

- Could the Library certify sources of data and information? As experts on collecting and managing information, the Library could set criteria for organizations to follow to increase their own capabilities and therefore trustworthiness.
Usability

**Theme definition:** Useful, usable, and satisfying. Can people find what they need, can they use it.

Many participants weren’t sure where to start when presented with the Digital Collection. While the task was essentially, “browse what interests you,” it was obvious, based on the feedback of all participants, that there was a fair bit of information overload.

Some participants were stuck looking at the items in the carousel, or on the main page of something such as the 10th-16th Century Liturgical Chants. They didn’t realize there was a tabbed interface and the content they were looking for was on a different tab. They wanted to see the collection, not the About page.

Issues abound with findability, “If I wanted to get to somebody whose name did not start with A, how would I go about it,” language used, “I don’t know what ephemera is,” and general usefulness of the available information, “I’m like, "Whoa! I wonder what I’m going to learn here,” and I click here and I find that you engaged with data management solutions provider AVP. What is this, a press release?”

Search is very slow and often doesn’t return any results. People are being trained by other search engines to see “results similar to your search.” That may or may not be a good thing, but given the impression people have of the vast amount of information at the Library, something should come back in a search.

The Experiments content in the Labs part of the site seems to be a mix of experiments, blog posts, and press releases. Either this section needs to be renamed or it should only show experiments.

There were many potential usability issues identified that may be hindering the use and trustworthiness of the site.
Usability

Recommendations

- Run some usability tests to highlight the areas of too much friction.
- Remove the dates from the content in the Experiments section. It makes everything look stale. Alternatively, add content more often.
- Rename “LC for Robots” to “APIs and Open Data” so that the title is descriptive and makes it easier to find
03 Theme Details

15 interviews, 188 data points, 10 themes. The following are all the data we collected from the interviews, organized by Theme. This is not a direct, 1-to-1 comparison with the Airtable as we deduped some items and rewrote summaries so they could stand alone in this document.
Access

Most of the participants mentioned that having access to the data, information, and help they need can be quite challenging. Many participants have their go-to sources, but all of them will eventually search for something—Library pages never come up.

- Issues with relevance, reliability, trustworthiness of data and information, and cost—too many sources are pay-to-play
- Systems (digital, service) are not optimized to help people or connect related information
- Several mentioned the desire to talk to a person and get help, but understaffed agencies make this difficult
- Lack of access to libraries, primarily because of COVID-19, but also some sense that they are outdated anyway
- Systems are often slow to update with new information
Ask a Librarian

There's a desire to connect with people in order to get help.

- Whither Ask a Librarian?
- Even trying to connect directly with a person doesn't always give them what they need
- It's hard to figure out which expert to ask
- It's a struggle to rely on understaffed agencies to make data available
- Starting with an informal request sometimes leads to a formal processes
- (FOIA) if there's resistance
Collaboration

Participants talked a lot about collaborating with colleagues or other organizations to get work done. There are several issues and opportunities here that the Library could potentially address.

- A lot of networking to find information—It takes a village to learn about things
- Many mentions of working together to create something
- Creating things for others to use or take and make their own
- Setting up a structure for learning, but recognizing they have to learn things herself along the way as well—and that is also a teaching moment for collaborators
- Working alone slows people down
- Creating ways for people to engage with dense topics, and making it understandable and relevant, is a goal and a challenge
- Getting peoples' attention is difficult
- Making space for others is important and a challenge
- Relying on experts to make your argument can be helpful
- Getting it right when making something for someone else, can come with challenges.
- One participant relies heavily on her own and the client's networks to get information to meet their needs
- Sharing work on Twitter for feedback from other experts can be helpful
Creation

All the participants create things as part of their work. Most of the time it is in order to change the minds and behaviors of their audience.

- Many participants talked about taking a multi-modal approach to sharing information, especially with an emphasis on making dense topics easier to engage with.
- Framing information gets very specific based on the context. Different audiences will need different levels of information, even on the same topic.
- There is a focus on making things for many people to use, even while the impetus for making it was to solve a specific problem.
- A couple of participants shared the challenge where they feel like they have to build data from scratch over and over again.
- Persuasive materials always include stats and a human-interest story—about, with, and for people.
- Some information is meant to be ephemeral, some is meant to last, but for the most part, creating something that is interactive is not on most participants’ radar. If they do need something interactive, it is someone else’s job (a specialist).
- Learning to present data and information within a different mental model is challenging.
- Historical content can bring context to presenting data—it’s useful, finding it sometimes is difficult.
- One participant noted that copyright laws are unclear and may be a barrier for how he wants to use the information—likely this would extend to other participants as well.
Impact

Being able to see you are having a positive impact on people is a big motivator for our participants and it’s not hard to see how that is true for most people.

- Most participants expressed excitement about having a big impact on people’s lives
- One participant mentioned she liked being in a position where she can make the reading experience more diverse, but spoke broadly that times have changed, why have the books which are taught not also changed?
- It is a constant challenge coming up with creative ways to impact people with the things they create
- It is important to be able to see the impact they are having
- Framing the argument (persuasive) well can have a big impact
- Helping holistically leads to better outcomes
- Enabling data-driven decisions is fulfilling and helps teams work better together
Local

Whether it is the issue they are addressing or the resources they are using, there was a lot of focus across all segments on Local.

- Several participants mentioned looking to “local” resources first.
- A lot of time spent networking to find information.
- Local libraries (including universities) are being used. One participant mentioned his school database had citation format options that made it easier to use.
- The idea of looking for data relevant to a certain location came up a few times.
- The desire to put information in context of the local and hyper-local (down to the historic neighborhood level).
- Goes to local resources to look up safety regulations.
- One participant is buying a house and thinking about how historical information can be useful to understand the neighborhood.
- One participant helps clients use online resources at the local library. This is the only computer access they have.
- To one participant, “a library” is the local library where she takes her clients and her children.
Marketing

Most participants, when asked what their impressions of the Library are, didn't have any other than, “It’s probably necessary?”

- Most participants were unsure of what the Library really is or does. A couple of participants weren’t sure how their current interests align with what the Library can provide
- Compliments!
  - “I just look at it as like it’s an esteemed public institution that I trust is very necessary for our democracy and that’s probably the extent of it. And there are probably very smart people who work there.”
- Assumption that the Library is all government data
- Assumption that the Labs site is more for programmers than researchers
- The Labs landing page doesn't convey a benefit. It doesn't seem useful, just fun
- To one participant, “a library” is the local library where she takes her clients and her children
Today Problem

Everyone we talked with is very busy, overwhelmed even. They are challenged with too many problems that need to be solved “today”.

- Engaging people is difficult, especially in a global pandemic—even with technology like video chat tools
- Coming up with creative ways to connect, virtually, is a big challenge
- Having things “pre-framed” is helpful—things they can use that are informative and easy to use
- So much time is spent finding sources that are relevant
- Systems not optimized to help people
- Ongoing communication can be a big challenge
- Systems slow to update with new information
- Even trying to connect directly with a person doesn't give them what they need

- When the goal is to change how policing gets done, there is a lot of work to be done
- Activists have enthusiasm but not necessarily training (related to literacy, mentioned previously)
- Research takes a lot of time and effort
- Inexperience with modern database programming is a limitation
- Google searches don't deliver enough; government sites don't “track very high” in Google
- Datasets can be too expensive to justify purchasing, even if they could be helpful
- Participants echoed needing fast help that gets to exactly what they need in the moment. Having searches work well is very important
- Has challenges meeting clients' needs in the moment when counties and hospitals take too much time to respond to requests. Mismatch in priority levels
- New data coming out daily needs to be processed immediately
Trust

Being able to trust the sources of data, in order to make decisions that impact peoples’ lives, is very important.

- Reliability and trustworthiness of data and information is a big issue
- Being supportive of others helps build trust and leads to receiving support in return
- If there is a good relationship, relying on other organizations to help make the argument stick is helpful
- Even trying to connect directly with a person doesn’t give them what they need
- Only trust people who are already familiar
- A desire to see keywords and information that indicate a non-traditional PoV would build more trust
- Google Scholar is not as “selective” or reliable
- Participants rely on their own expertise when faced with conflicting information
Usability

As mentioned, this was not a standard usability test, but several site issues presented themselves during the interviews. There are many opportunities to improve the basic usability of the site. Having a strong Information Architecture with navigability makes a site more appealing and easy to use.

- There is too much information to take in at once. There is hierarchy, but it takes an investment to understand it. Several participants got lost quickly
- The mix of content types in a category of Labs was confusing
- A few participants expressed interest in creating their own collections
- Participants did find things of interest in the digital collection, but it felt like a bit of a struggle to do so
- Two participants mentioned that they could see Citizen DJ helping kids express themselves, but they had to be led to it
- Building the right search query is not easy—it is difficult to guess what will make the search engine bring something back
- Some first impressions of Labs site being “fun”, but several expressed disappointment that the experiment results page is not useful
- One participant thought there would be digital book collections, but couldn’t find anything on the site
- Transitions between a “modern” UX on the labs page and a “more conventional” experience within Collections feels jarring
- Unfamiliar vocabulary
Appendix

The following are some of the key outputs we co-created with LoC Labs that directed this research piece.
Project Goals

- Evidence-based recommendations for making collections more available and usable
- (Understand how to) reach users we (LC) are currently not serving
- Inspire and inform our colleagues throughout the Library
The focus of the research

Awareness

Discovery

Use

Connection

people we know little about, who may not know about us

people who may know about us but are unlike our regular users

people who don’t know about us yet but might be interested

people who are attracted to similar activities/places/subjects

people who share our interests

occasional users

regular users

supporters

us

Inspire and inform our colleagues throughout the Library

Evidence-based recommendations for making collections more available and usable

(Understand how to) reach users we (LC) are currently not serving
User types - a combination

Users who are not currently connected to the Library

Users who are employing emerging styles of digitally-enabled research, visualization or analysis

Users who might develop applications, share, learn, teach, connect or otherwise communicate with Library materials

Users who might develop applications, share, learn, teach, connect or otherwise communicate with Library-like materials who are not currently connected to the Library
The target audience

Users who might develop applications, share, learn, teach, connect or otherwise communicate with Library-like materials who are not currently connected to the Library

People who are attracted to similar activities / places / subjects

People who share LoC’s interests

Potential to connect to LoC

Potential to reach others up in the pyramid

Public librarians

Authors

Public Policy Data Analysts

Home Schoolers

Publishers

Home Schoolers

Undergraduate students

Amateur historians

Data reporter / Media specialists

School pupils

High school teachers

Family historians / genealogists

Activists / community leaders

Artists

Musicians

Software developers

Content aggregators
Thank you!