

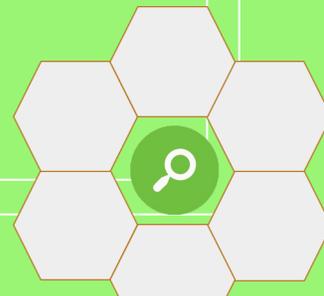
**Research**  
How is it experienced?

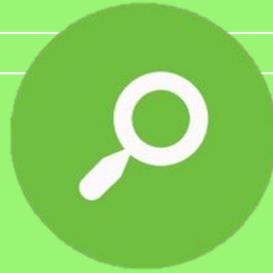
## Background Research

This poster describes the work of the Library Lifecycle project which aims to facilitate the U-M Library's adoption of user-centered practices by creating a toolkit containing a series of human-centered artifacts, with associated instructions on use, representing the students, faculty and staff that make up our diverse community of library users and partners. Work on this project began in November 2017 with the first phase of work ending in August 2018.

The objective for this project was not a list of findings, conclusions or correlations about user behavior; instead, we sought to build on the knowledge and capacity of our colleagues through a toolkit that helps library colleagues explore:

- ⇒ Who are our users?
- ⇒ What do and don't we know about them?
- ⇒ Have they been included in our services?





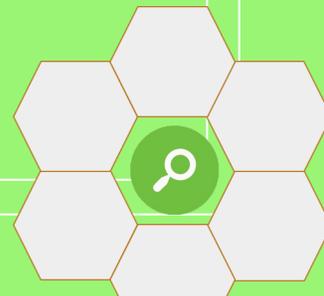
**Research**  
How is it experienced?

## **Background Research**

**Our intent with this project was to inspire holistic innovation by deviating from the traditional persona model or creation template illustrated on our poster.**

**In libraries, we proudly declare that we exist to “serve everyone” in our designated communities. Through this lens, the tragedy of personas like Faculty Frank or Bookworm Betty, who embody an average user from a particular group, becomes apparent: If we’re focusing on meeting the average person’s needs, we leave out the people at the margins.**

**By presenting information in an interactive, contextual way that goes beyond what even a set of personas can do, the artifact we created helps spark new ideas about how our colleagues can serve and partner with our community.**





## **Ecosystem**

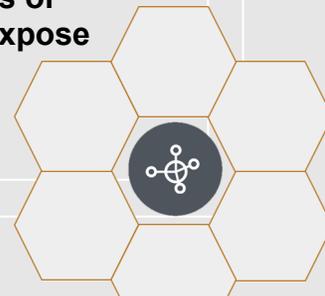
What influences the experience?

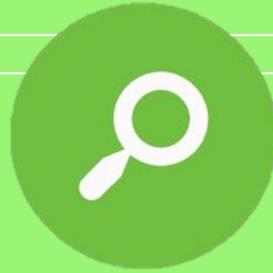
# **Mapping Influencers**

**To begin this project, we held an all day session to think through what is influencing the experience of faculty, students and staff on campus. During this session, each member of the team used a “traditional”, broad faculty, undergraduate or grad student persona to do initial brainstorming.**

**On a bullseye drawn onto the wall, we used our previous knowledge and assumptions to map out what, who, when/ where and how our users are influenced in their time at U-M. Through this exercise we established what we felt we knew and didn't know about our campus community. This guided the research we pursued.**

**The result of this exercise was defining five different experiential contexts. We named these contexts the Personal, Social, Logistical, Professional and External contexts. They loosely map onto the labels of the different bullseye rings as shown in the yellow figure on our poster. These high level categories were what we used to group our data. We worked within this constructed framework to better grasp the different aspects of experience that we wanted to document and expose to our library colleagues.**





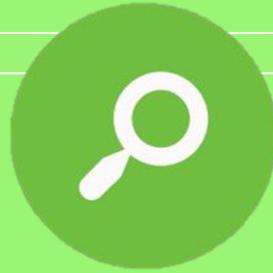
**Research**  
How is it experienced?

## Compiling Data

We used the following definitions to code our data into bucket categories in a qualitative data analysis tool called Dedoose:

- ⇒ **Personal:** Internal influencers related to personal well being that impact campus life for users such as: mental and physical health, home life, feelings, stress, happiness etc.
- ⇒ **Social:** Influencers from social contexts. This includes aspirations, being social for wellbeing, social isolation or anxiety, friends, fun, social pressure, family expectations, romantic life etc.
- ⇒ **Logistical:** Influencers based on what the person is doing day-to-day, technology they are using, daily needs/tasks to accomplish.
- ⇒ **Professional:** Influencers from the person's professional domain such as requirements for entry level jobs, expectations from professional organizations, requirements from a boss, professional aspirations, pursuing networking opportunities etc.
- ⇒ **External:** External factors mostly outside of the user's control that influence their life on campus such as politics, university policy, requirements, weather etc.





**Research**  
How is it experienced?

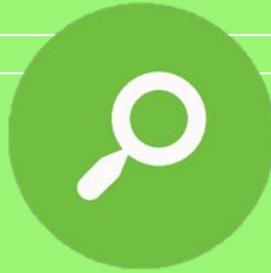
## Compiling Data

The first step in data analysis was to compile the pre-existing data from user research studies conducted in the library. To better understand the context of campus as a whole, we also included enrollment statistics and pulled data from external sources such as the ITHAKA Research Practices reports that elucidated common practices within specific fields. This would help us identify gaps in our knowledge and determine where we should focus our subsequent research efforts.

- ⇒ EBSCO UX Studies
- ⇒ ITHAKA Reports
- ⇒ Steelcase Reimagining the Library Experience Report
- ⇒ Ask a Librarian Feedback
- ⇒ U-M Student Group documents
- ⇒ Accessibility User Research Data
- ⇒ Common topics through hashtags on social media
- ⇒ U-M Student News Articles
- ⇒ Enrollment Data

We coded this data in a qualitative data analysis tool called Dedoose.





**Research**  
How is it experienced?

## Conducting Research

**At the end of March and beginning of April, 2018, we conducted 30 contextual interviews about campus experience with:**

- ⇒ **14 current undergrads,**
- ⇒ **3 recent undergrad alumni,**
- ⇒ **5 PhD candidates,**
- ⇒ **3 grad students,**
- ⇒ **3 staff and**
- ⇒ **2 lecturers**

**Disciplines ranged from medical studies, natural sciences, business, humanities, social sciences and architecture. The location of interviews ranged from faculty offices to cafe's near campus to library meeting rooms. Interviews were scheduled for one hour and were conducted in teams of two, with one person asking questions while the other took notes. All interviews were audio recorded with the permission of the interviewees and de-identified prior to analysis.**

**In our interviews we asked people to describe their experiences in different contexts during their time at U-M. We used the identity wheel on the poster to prompt them to describe different parts of their identity that they did or didn't feel influenced their motivations and decision-making.**





### Analysis

Make sense of the ecosystem and how it's experienced.

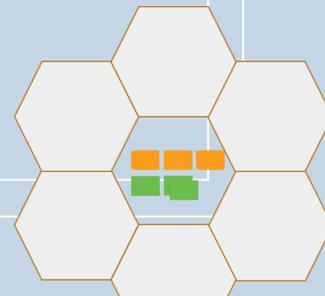
## Affinity Mapping Round 1

We did multiple rounds of affinity mapping throughout this process. Affinity mapping is a method for sorting a set of qualitative data and categorizing like statements from which you can draw insights.

After our initial round of coding in Dedoose, we printed out our coded excerpts so that we could more effectively visualize the information we had so far. We looked at what we had categorized in each top-level. In each one, we grouped like statements and gave them a more specific sub-level label.

Our overall conclusions from this round was that we knew a lot about what kinds of research activity users are engaged in as well as a how they get their work done in the higher education world. But, we did not know a lot about the motivations behind those activities or the social and personal worlds that influence professional goals in higher education.

These insights influenced the development of our interview protocol.





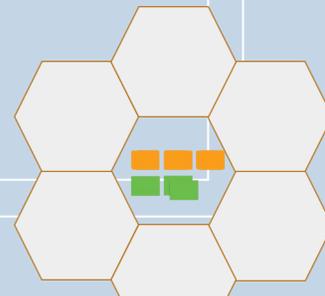
### Analysis

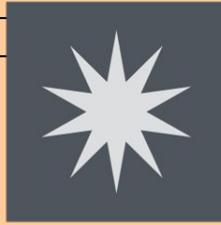
Make sense of the ecosystem and how it's experienced.

## Final Affinity Mapping

After we completed our interviews, we used a transcription service called Rev to generate text transcriptions. Each transcript was then processed by a team member to divide it into discrete quotes that could be sorted in later affinity mapping. We divided the text from the transcript (making corrections where it's didn't match the audio) so that each quote was a complete idea or statement. When appropriate, we annotated these quotes in an adjacent column with information that was important, but which might be lost when the quote was separated from the context of the full audio recording of the interview.

Upon completing this cleanup of our interview transcripts, we again printed out all of the excerpts that we had summarized from the raw transcripts. We combined these excerpts with all that we had sorted from our first round of affinity mapping. As we sorted, we began documenting the affinity map in a digital format. We thought that this would allow our colleagues to read through the information without having to read through each slip of paper, socializing our data. With this goal in mind, we decided to use "I Statement" format for organizing our data.





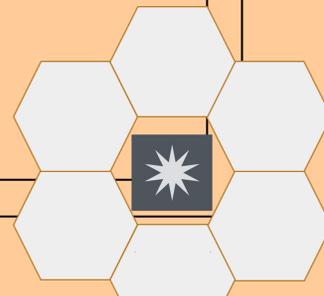
### **Opportunities**

What can we do about it?

## **Prototyping Design Sessions**

**To begin to externalize our research and explore opportunities for our final artifact, we held a prototyping session where we created a total of 10 prototypes and discussed the strong points of each in accomplishing our project goal. We decided that a facilitated game was our most viable option to go forward based on the progress we had made with our research.**

**After deciding that a game or activity was the best way forward, we held another session to further prototype what that activity might look like. We kept it low fidelity, making hand-written cards and a hand-drawn board. The activity is a guided storytelling activity where participants are given a set of background cards (based on our data) about a user that they then string together into a narrative about a character. Participants then walk with this character through time, thinking and sharing about how their character might react in different scenarios, guided by a facilitator.**





Synthesis

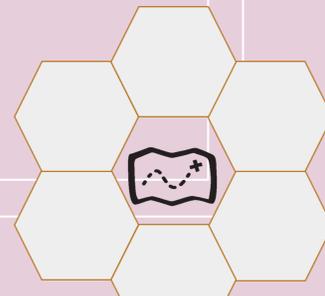
What's the story?

## I Statements

In order to pinpoint the influencers at play within our data to communicate them with our colleagues, we decided to create “I statements” for each category delineated through affinity mapping. For example, a large category such as “Study Preferences” was further broken down into not only the type of preferences noted, but the reasons why interviewees had that specific preference. In total, we created 400+ “I statements” that we documented in a spreadsheet.

The spreadsheet lists a high level category as well as listing whether this is a statement about the person's background, behavior, motivations, the capacities they bring to the table or availability to resources. Also listed are the sources from which the “I Statement” was formed including the frequency with which the theme of the statement came up in our interviews and other compiled resources.

Our poster lists a few examples of what these statements look like.





Synthesis

What's the story?

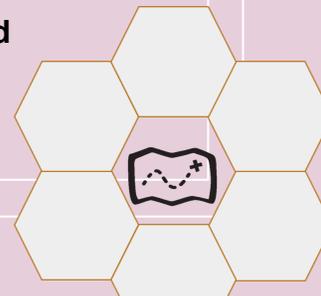
## Prototype Testing

**We tested our prototype activity with two groups of colleagues, both advanced in their understanding of service design techniques and user research. We tested the viability of the game, observing whether participants had enough structure in the game to be able to dig into storytelling.**

**Our overall takeaways from this testing were:**

- ⇒ **A facilitator is needed to encourage participants to dig deeper into the story of their character**
- ⇒ **Participants became connected to their character in a very short time. They felt invested in them, wanted to help them and really felt like they knew them. We saw this as a success for our activity in its ability to build empathy.**
- ⇒ **Because our user groups were an advanced groups, they were mostly ready to dive into an activity like this. More testing with groups less familiar with user experience and service design methods is needed.**

**We determined that testing with less advanced groups is needed to understand if the game still accomplishes its goals**





Continuous Improvement

## Next Steps

**In August 2018, we completed the first phase of work on the Library Lifecycle project. The next steps include:**

- ⇒ **Library as Research Lab: University of Michigan School of Information Graduate Students are currently working on the next iteration of this effort. They are in the process of developing a higher fidelity prototype and testing it with different staff groups at the library.**
- ⇒ **Service Design Toolkit: The work of the Library as Research Lab team will be integrated into a more comprehensive set of templates available to staff who are undertaking service design efforts.**
- ⇒ **Website Redesign Application: The data that we collected in the Library Lifecycle project is currently being used to develop comprehensive persona categories. These categories of: student, researcher, instructor and visitor will be activated in different phases of the mockup, testing and design process.**

