Diffusing Organizational Change through Service Design and Iterative Assessment

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Purpose

In 2016, the University of Michigan Library (U-M Library) began the process of transforming physical and virtual spaces to serve the emerging needs of our research community and taking care to ensure that, whatever form our buildings and web presence take, it will follow the function and intent of our services.

The U-M Library is a large, complex library with nearly 500 staff and librarians, millions of collections, and hundreds of unique services. Although the library has a decentralized organizational structure, the benefits of such a structure include the ability for departments to be nimble, responsive, and find creative solutions that are more personalized and that take advantage of unique expertise. However, when each division, department, and unit can act independently, it can be a real challenge to move forward large, important, library-wide initiatives. Implementing large-scale change that directly impacts the culture and physical space, as well as conducting meaningful assessment, becomes a complicated endeavor.

The library established three intersecting goals to frame this process. The first goal is to take a strategic approach to physical space planning. The second is to strive toward making our buildings and services welcoming, accessible, and safe. The third goal is to transform our organizational culture, including developing skills and capacity within our organization to become more user-centered and service-centered. In order to effectively implement these goals, the library has begun to apply a service design approach and an assessment-driven mindset across our organization.

The U-M Library Service Philosophy drives organizational change, encourages continual assessment, and transforms spaces to improve user experiences.

In 2016, when the library began this work in earnest, we collaborated with brightspot strategy to develop a set of guiding service and space principles based on our existing mission, vision, and guiding principles. Our initial engagement with brightspot strategy spanned six months and included designing and implementing a series of focus groups, holding workshops, gathering and reviewing existing data from our organization, and developing a campus-wide survey.

Three key principles emerged from this effort that drive our work forward and help to align our intentions with our previous strategic efforts.

1. **Enhance the Platform for Discovery** through foundational changes to physical and digital space usability, access, and navigation.
2. **Accelerate Partnerships in Scholarship** by engaging with library users and working them throughout the service experience.
3. **Deliver as One Library** with a shared service philosophy and improved library staff workspace.

Introducing change in a large, complex, decentralized library is challenging, and fostering a new service philosophy and framework in the library is a big task. Brightspot strategy delivered to us their “Hatcher-Shapiro Library Service and Space Strategy Playbook,” a report that provided a vision for the library services and spaces central to the scholarship of our campus community as well as a how-to for the library organization to explore future scenarios and pilot implementation.

Library administration appointed the three of us—Emily Puckett Rodgers, Meghan Sitar, and Rachel Vacek—as a team to co-lead the effort to put into action the recommendations and frameworks from the Hatcher-Shapiro Library Service and Space Strategy Playbook. Called the Service Design Task Force, our team recognizes that three people alone cannot change the culture.

We knew early on that we needed champions across the library who embraced the concepts and wanted to start using the service framework. By committing to evaluation throughout the service design process, we (as well as identified champions for this process) begin to gain confidence in our efforts to change the way we approached vastly redeveloping a space, service, or feature based on intentional and iterative user-focused design. It has been easier to think about larger and more out-of-the-box solutions within a context where we are empowered to take risks and recognize that we are regularly evaluating our ideas, concepts, and designs in supportive environments.

Library staff engage with recommendations from the Hatcher-Shapiro Library Service and Space Strategy Playbook at a Champions Workshop in fall 2017.

Since 2016, we have made strategic hires in this area, including positioning librarians whose responsibilities cover assessment across our operations, learning and teaching, collections, and deans' divisions. We created new tools and resources to help library staff and librarians engage with the new service design approach and integrate assessment into routine practices. We established new types of service-based teams to focus on the needs of the user and let that drive the service as opposed to using budget, technology, or tradition drive the direction. Developing champions, from the grassroots to library administration, was also essential for helping to shape the organizational culture and shift to a user- and service-focused environment.

Methods and Approach

Methods

This work hinges on adaptations and alignment of three major methods—from service design, design thinking, and user experience design and research—that all place emphasis on designing for and with our users and on iterative development of work based on feedback and testing. We combined and adapted elements from these methods to realize the three key principles and associated service strategies. Each of the key methods we have adopted for this work provide a distinct set of benefits to our organization and provide us with a structure in which to deploy continuous evaluation and alignment in this effort. Our work is not an assessment program in itself but a service design initiative with assessment integrated into the process through these methods.

Service design enables us to pull together our work across departments and divisions in different ways than we have done in the past and enables us to review, develop, change, or strengthen processes that are designed to provide value to our users in the form of integrated and connected services. Based on developing artifacts or theories to test with colleagues or users in real-world settings in quick, tight feedback loops, we were able to create opportunities for reflection, reprioritization, and learning throughout this work. Two key resources used to guide this work included the ***This is Service Design Thinking*** by Marc Stickdorn and Jakob Schneider (2012) and ***The Service Innovation Handbook*** by Lucy Kimbell (2015).

Design thinking strengthens our ability to create feedback loops and take an action-oriented approach to this work, shifting our work away from theorizing or researching a topic but not actually generating something that we can actually test with real people or against existing processes. It enables us to build capacity and experience in creative problem-solving that is structured to yield a tangible result that we can then adopt or learn from. Key resources associated with our design thinking approach include the Design Thinking for Libraries toolkit (<http://designthinkingforlibraries.com/>), IBM's Enterprise Design Thinking (<https://www.ibm.com/design/thinking/>), and IDEO's Design Thinking (<https://www.ideo.com/pages/design-thinking>) resources.

User-centered design provides methods and tools for us to use that continue to place our users (our faculty, staff, students, and researchers) at the center of our work throughout the design process and helps us hold ourselves accountable to our designs and our intentions. Key resources associated with this approach include Luma Institute's ***Innovating for People Handbook*** (2012) and our existing expertise from our design and discovery and our library environments departments.

Approach

In order to begin adopting these methods and the service and space philosophy and design principles, the Service Design Task Force created a series of six service design teams to experiment with, adopt, and review these new ways of working. The topics of the teams are: consultation, staff innovation, digital scholarship, library as research lab, citation management, and the library lifecycle. We applied a continuous evaluation approach to this work, providing opportunities for reflection at many points along the process. As we launched this work, we communicated back to our colleagues that this effort itself was an experiment and we committed to evaluating both the process (how well do the methods and tools work?) and assessing the outcome of the effort (what impact does it have?).

We applied a continuous evaluation approach to our service design work as we conducted user research and planned for pilots and prototypes of the ideas.

Teams included two co-chairs who partnered with one member of the Service Design Task force—acting as a design partner—to plan, execute, and organize the work produced from the teams. Team members were chosen from across the organization based on their expertise, experience, or perspective rather than from where they sat within the organization chart or administrative structure of the organization.

Three teams developed service designs for some of our library’s more complex and value-driven aspirations, which included designing a locally relevant, impactful approach to digital scholarship on our campus, developing an approach to fostering staff innovation throughout our organization, and creating a distributed but aligned model for consultation across our various departments and libraries. Other teams associated with this work were dedicated to applying or exploring facets of these methods in other contexts. For example, one team approached citation management from a service-driven perspective and conducted additional user research and developed a local toolkit to build capacity for user-centered design. This work was conducted by staff within our organization and explored research services for graduate students through a grant-funded project with the University of Michigan’s School of Information.

Drawing from the research brightspot had already delivered to us, and using methods like focus groups, immersive and analogous experiences, and user-centered tools such as journey mapping and persona development, teams began their “deep dives” to design services and deliver a service blueprint over a period of six months. Teams followed the four cycles of service innovation, framed as “Exploring Issues” (exploring context, history, and influencers surrounding the issue and gathering information to better understand user needs), “Analysis” (understanding the issue in context and identifying the target audience), “Generating and Exploring Ideas” (generating multiple potential solutions and prototyping these), and “Synthesis” (determining the next steps and creating pilots). Members of the Service Design Task Force helped facilitate the design workshops and activities over the course of the semester and prompted times for reflection. We met as a team ourselves to support each other’s work, provide input, and make adjustments along the way.

The service design process we used at the U-M Library had four cycles: Exploring Issues, Analysis, Generating and Exploring Ideas, and Synthesis.

We also created an additional cycle, not represented in the above diagram, at the beginning of the process for team formation. This was an important step in team formation and in introducing the team to each other, the charge, and the approach they were being asked to learn and to apply to this process. During this cycle, teams engaged in a self-reflection exercise and a values exercise that generated unique design principles for each team based on the capacities, perspective, experience, and values each individual brought to the project. This resulted in team contracts that were used to guide work and maintain integrity through the process. In subsequent cycles, this document was referred back to during evaluation to review and understand how teams progressed through this work.

Each cycle applied a set of methods to support the service design of each team based on their charge. These methods generated a set of artifacts designed to assist the teams in moving through the cycles of the work and as guiding resources for future stages of work. Each team received the same “binder” of resources—tied to the four cycles of work— we developed based on a set of shared exercises and methods from the three approaches we have adapted to this work. With this structure, we aimed to help set expectations, provide enough structure for the teams to create rich, impactful work, and help to facilitate training and skill-building for these design methods within our organization.

As part of their work, each team designed at least two stakeholder engagement activities to better understand their users and inform their designs or to present portions of their service design for feedback. Teams gathered feedback through brief intercept interviews, conducted workshops, or designed feedback mechanisms to have portions of their designs evaluated for relevancy or accuracy in representation. These engagements happened during cycles two and cycles four of the work.

The service design team charged with staff innovation defined an opportunity for our organization to deeply consider what staff innovation looks like for us from a service and a culture perspective through engagements with our staff and managers. The team organized a feedback session to engage staff across the organization in discussing these three questions:

- What does “innovation” mean to our organization?
- What could a culture of innovation look like at U-M Library?
- How does this impact the ways in which we invest in our staff and managers?

From notes from the session, the team qualitatively analyzed the results to find themes and review results against their personas, stories, and draft service designs.

The team charged with reviewing and conducting additional user research to inform the development of a toolkit gathered existing research from library activities, including collections assessments, teaching and learning evaluations, and user research. This team, the library lifecycle team, qualitatively analyzed this existing body of data. From this, the team generated a series of interview questions to gain more insight into the academic experience at U-M for graduates, undergraduates, and faculty. Over the course of the winter 2018 term, they conducted 30 in-person interviews and qualitatively analyzed this information using the same coding structure from the existing research. This research informed the development of artifacts, including a game and set of personas, aimed at supporting the application of user research across the library for staff at any level within the organization through a user experience toolkit.

A personality trait wheel used to begin conversations with campus users as part of the 30 one-hour interviews for the Library Lifecycle Project Team. Adapted from: Gardenswartz, L., & Rowe, A. (2008).

We incorporated self and team reflections at the end of each design thinking cycle for teams. Teams used this time to reflect on the experiences, output, and impact of each cycle's set of activities. Since every aspect of this work, from the team structure and formation, to the charge, and the approach, was new to the organization, it was important to include evaluation along the entire process. The team contract served as a rubric against which teams could evaluate their progress based on their own values and personal contributions. At the end of each cycle, teams reflected on their comfort with moving through to the next stages of the work and on the utility of the methods and exercises employed along the way.

At the end of July 2018, Denise Leyton, Larissa Stenzel, Kat King (all from the library environments department), and Craig Smith (assessment specialist) developed and conducted five, one-hour in-person feedback sessions for the members and chairs of four of the six service teams: digital scholarship, staff innovation, citation management, and consultation. We also provided an option for members and chairs to respond through a Qualtrics form if they were not able to make an in-person session. All chairs and fourteen of the eighteen members participated either in-person or through the Qualtrics form and provided feedback on team formation, methods used, and overall impressions.

Findings

Our intentions for this effort were manifold. For library staff, we intended this work to be tangible and immediately useful to our service design teams in their work. We aim to teach people about the tools and make them usable to anyone in our organization, whether they are creating new services or evaluating existing services. These tools can be used to inform both large-scale and more localized decisions about workflow changes, service changes, etc., so that we begin to use the same tools across our organization to approach our work. Again, with such a large and decentralized library, sharing similar tools and workflows can help with our One Library service philosophy.

Our goal for organizational change was to create a process that was adaptive and facilitates iterative design. As the library moves from a resource-focused environment to a more user-focused and feedback-focused one, embracing a more iterative design approach will help service design teams or service providers to more frequently check to ensure our services are aligned with user needs. Also, one of our goals for the organization was to recognize both front- and back-of-house needs and workflows so everyone across the library could connect with the service design approach whether or not they directly worked with users.

As for team formation, while some participants had prior experience with user-centered design, several of those without that experience mentioned a lack of clarity on learning these new types of exercises. They found it took some getting used to the different way of working in service design. Although many felt their co-chairs and/or design partner explained the exercises well, they were unsure of the next steps after this phase. This involved confusion over how they would hand off their work to the next team. Many members had an understanding of how they could contribute their knowledge and experience, but some members were not as sure of the specifics of their role. Some teams discussed their roles/why they were on the team at the very beginning, while others never discussed it or came to an understanding at the end. Team members generally saw the design partner as someone to help them get “unstuck,” move forward, and look at things a different way.

Participants and chairs also provided feedback on the various methods and exercises used throughout the time the service teams did their work. Some thought a lot of time was spent learning the process of the activity rather than doing it because of those who were less familiar.

There was a general sense that there were too many activities in too short of time and that the less helpful, repetitive ones could be cut out. Some members mentioned that these types of deep dives will not be necessary for some projects due to their time-consuming nature.

Overall, time and scheduling came up as the two biggest challenges from almost all team members, and especially the chairs. Some expected this but did not realize how much it would take them away from their other work. Some felt they were not prepared up front and if they had known the amount of time they would spend on the team, they might not have said yes. Despite overall sense that the time commitment was extensive, most team members expressed a general appreciation for and personal investment in the work. Additionally, they would have liked better administrative management to balance their other obligations with this project.

In reflecting on this work, we also recognized that user-centered methods are already in use elsewhere within the library and that service design should not necessarily replace those other methods. However, with

this process, we can better describe and test our own assumptions and identify and move forward on ideas with more concrete steps, using tools like the service blueprint.

Value and Practical Implications

Thus far, we have seen positive impact in our organization in three major ways: service team dynamics and team formation, capacity building, and evidence-based service design. By taking an evidence-based approach to our work, we are proving the value of testing service models in systematic ways. The initial investment for this type of work is intense and time-consuming.

Service Teams

The concept of service teams is one we are starting to employ across other areas of the organization. Rather than approach our work from a traditional committee-based perspective, we are beginning to intentionally develop service teams to address other known issues in the library for which a service design approach is applicable and relevant. These teams have specific charges, a dedicated timeframe, and are expected to produce different types of outputs and apply user-centered methods to their work. Their formation also includes generative discussion sessions to identify values and understand team dynamics as a way to build trust within the team and a cohesiveness not always present in committee work. Members of service teams are identified and participate based on their expertise or experience, not where they sit within our organization.

We are beginning to employ the service team approach in our website and web presence redesign efforts and other large-scale efforts that impact the organization. In addition to the structure of these teams, the user research conducted by the library lifecycle team is being used to create personas to inform our design and testing of new content structures for the library website. In this way, we are seeing the efforts of our work become embedded in processes that exist outside of our original charge and teams and become embedded in other areas of work and effort.

Resources and Capacity Building

Overall, if we are to continue to adopt this approach in our organization, we need to understand how to embrace this approach as one of many that we employ based on the challenge at hand. We also need to learn how to diffuse this work across the organization from the perspective of understanding the guiding principles, frameworks, and methods, but also from a capacity-building perspective so that this expertise or approach does not sit within one small group of individuals or projects but can be applied at different scales with different configurations of teams and capacities.

Much of this work hinges on providing staff with additional resources, expertise, and support to do their work in different ways. Without this, we cannot expect our organization to change in habit and behavior. Based on staff input and tests, we are developing higher fidelity versions of the user-experience game for our user experience toolkit with staff who are participating in the staff innovation pilots and in other areas of the library. We aim for this toolkit to be useful to staff across all departments and divisions within the library so that they are able to more easily and confidently employ design thinking, service design, and user-centered design approaches into their daily work routines. After another round of testing the game and artifacts of the toolkit, we can begin building guides, resources, and training into the toolkit.

Internal consultations as a model of capacity building and expertise-exchange are becoming more widely integrated into the organization. In order to test facets of the staff innovation service blueprint, our library's program manager and assessment specialist are providing consultation hours and evaluating their impact across the organization. This will help us better understand how expertise-sharing through peer-to-peer networks translates into new approaches to work, process improvement, or our ability to develop solutions to complex challenges. As a next phase of the Service Design Task Force, we are developing an intake process through which colleagues can connect to the experiences we have gained through this process to better understand how, when, and in what ways elements of service design might benefit their work or projects.

Communication remains a key component of the success of this work. It has not always been clear to our service design teams, our colleagues, or even to administration, what we aim to accomplish, test, or learn from this work. It is hard to communicate the piloting and testing components of the service design and to build confidence in this process. We continue to learn how to effectively communicate this work to our organization and colleagues. We have learned that it is extremely important to have colleagues with an existing confidence and deeper understanding of the methods we are applying to this work, how to use them, and when to adapt them. Because of the size and scale of our library, we should be considerate of the scope of the opportunities we put through service design.

Evidence Based Service Design

In some cases, it has been confusing to colleagues to be presented with a hypothesis that needs further testing to understand across contexts, scale, and complexity rather than a finished product or service that is “ready to launch.” In the past, our organization has not engaged in purposeful testing at various scales, preferring to pursue a phased rollout of new services and programs. This has, in some cases, resulted in gaps in efficiencies across teams, departments, or staff who have a responsibility in service delivery, and sometimes even confusion as to what the services are to our users.

We have benefited greatly from building in evaluation along the way through this work. While it can be easy to put off until the end of a project, building evaluation into the structure of the work enables us to create strong opportunities for reflection and learning. When we are ready to test this work “in the open,” we can be confident that what we launch has quality and integrity even if we change aspects of it based on what we learn to suit context, scale, or user need.

Over the course of the summer and into the fall 2018, as the service design teams wrapped up their work and the next phases of these efforts got underway, the organization has seen a variety of approaches to begin testing the service designs and service blueprints presented by each of the original service design teams. We have benefitted as well from the expertise of our assessment specialist in supporting effective ways to evaluate our pilots and prototypes moving forward. For example, we are developing a series of three pilots to test facets of the consultation service blueprint before launching a pilot of the full service. This includes: creating physical prototypes to test, piloting new software used to manage information flow and communications, and testing the model with a subset of specialists who can review and refine portions of the service based on their existing expertise.

By creating opportunities for evaluation, both internally and externally facing, within the process, we are able to more systematically evaluate the work we are engaged in and determine its efficacy toward achieving mission-driven goals. We have framed this work consistently as culture change and much of the current and future impact of this work stems from changes in habit and behavior. This approach, based on putting users in the center of our service designs, flips the way we have managed our work in many ways. In years past, our organization has relied heavily on administrative structures to guide our internal collaboration, service development, and representation on cross-divisional efforts. Service design provides structures to enable staff to flip their approach to work by providing consistent and aligned frameworks, principles, and methods to use and in ways that empower staff and engage users in meaningful ways.

The results are services that continue to remain user-centered, maintain integrity to the original design principles and services that guided the initial work, and are built on tested models that were either proven to support the service or were changed based on feedback from stakeholders and users alike. By building in evaluations throughout this process, we learned both from our users and from our colleagues in how to scale and implement a program such as this. While our organization is still working through adopting all facets of this work, in big and small ways, we have already witnessed impacts throughout the organization. We are still in the early stages of creating this process, but we are confident that we will continue to see system-wide changes based on our approaches and on our learnings.

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Bibliography

IDEO. *Design Thinking for Libraries*. IDEO. 2014.

Gardenswartz, L., and A. Rowe. *Diverse teams at work: Capitalizing on the power of diversity*. Alexandria, Va: Society for Human Resource Management, 2008.

Kimbell, Lucy. *The Service Innovation Handbook*. Amsterdam, Netherlands: BIS Publishers. 2015.

Luma Institute. *Luma Institute: Innovating for People Handbook of Human-Centered Design Methods*. Luma Institute. 2012.

Stickdorn, Marc and Jakob Schneider. *This is Service Design Thinking*. Hoboken, NJ: Wiley Publishing. 2012.